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NORTHAMPTONSHIRE COUNTY COUNCIL

•

Annual Report

OF THE

MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1935

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CONTENTS.

	<i>Pages</i>		<i>Pages</i>
Adulteration, etc.	29	Maternity and Nursing Homes	13, 49
After Care—Tuberculosis	43	Measles	33
Ante-Natal Services	16	Meat and other Foods	29
Area	8	Mental Deficiency	17
Births	8, 56	Midwives	13
Boarded-out Children	17	Milk—Accredited Producers Scheme ...	11
Census, 1931	8	Milk—Examination of	10, 27, 28
Cerebro—Spinal Fever	33	Milk—Graded	10, 27
Chicken Pox	33	Milk—Public Health Regulations ...	31
Chronic Sick, provision for	12	Milk—Supply of Free Milk	16, 27
Clinics and Treatment Centres	16, 19, 35, 50	Milk and Dairies (Consolidation) Act, 1915	27
Closet Accommodation	26	Milk and Dairies Order, 1926	27
Deafness and Deaf-Mutism, Prevention of ...	18	N.S.P.C.C., Co-operation with	17
Deaths	8, 56	Nursing in the Home	13, 33
Dental Treatment	18	Obstetric Facilities	18
Diarrhœa and Enteritis	33	Ophthalmia Neonatorum	15
Diphtheria	32	Orthopædic Treatment	16, 37
Dispensary Work—Tuberculosis	35	Pneumonia	33
Drainage and Sewerage	25	Polio-Encephalitis	33
Educational and Social Work	13, 47	Poliomyelitis	33
Encephalitis Lethargica	33	Populations	8, 56
Enteric Fever	32	Propaganda (Venereal Diseases)	47
Erysipelas	33	Public Assistance	12
Factory and Workshop Act, 1901	61	Public Health Officers of the Authority ...	3
Food—Inspection and Supervision of	27	Puerperal Fever and Puerperal Pyrexia ...	8, 14
Food and Drugs (Adulteration) Act, 1928	29	Rivers and Streams	12, 24
Health Propaganda	47	Rushden House Sanatorium	44
Health Services, General Provision of	10	Sanitary Circumstances	20
Health Visiting	17	Scarlet Fever	32
Hospital Accommodation	15, 32	Smallpox	32
Infant Life Protection	17	Social Hygiene	48
Infant Mortality	9, 56	Statistics and Social Conditions	8, 49
Infant Welfare Centre	50	Tuberculosis	33, 51
Infectious and Other Diseases, Prevalence of and Control over	32, 60	Unmarried Mothers, Institutional Provision for	17
Influenza	33	Vaccination	32
Laboratory Facilities	10	Venereal Diseases	45
Local Government Act, 1929... ..	12, 23	Veterinary Inspection of Dairy Cows ...	27
Maternal Mortality	8, 14	Vision, Defective	18
Maternity and Child Welfare... ..	13	Water Supply	11, 20
Maternity Beds in Institutions	15	Whooping Cough	33



Public Health Officers of the Authority.

(This list has been corrected up to the date of publication)

(a) Whole-time Officers of the County Council.

County Medical Officer of Health—

J. M. MACKINTOSH, M.A., M.D., D.P.H., Barrister-at-Law.

Deputy—

J. H. CRANE, M.B.E., B.A., M.D., Ch.B., B.A.O., D.P.H.

Assistants—

H. ROGER, M.A., M.B., Ch.B., D.P.H. (Senior Assistant).

LILA S. GREIG, M.B., Ch.B., D.P.H. (Maternity and Child Welfare).

IVOR J. JONES, M.B., B.S., D.P.H.

J. A. ROUGHEAD, M.D., Ch.B., D.P.H. (from 1st June, 1936).

Clinical Tuberculosis Officer—

G. B. LORD, M.D., Ch.B.

County Mental Hospital, Berrywood ;

Resident Medical Superintendent—

F. J. STUART, M.R.C.S., L.R.C.P. (retired 3rd September, 1935).

E. D. T. HAYES, B.A., M.D., D.P.M. (from 3rd September, 1935).
(formerly Deputy).

Deputy Medical Superintendent—

JOSHUA CARSE, M.D., B.S., D.P.M. (from 21st October, 1935).

Second Assistant Medical Officer—

H. C. REED, M.B., B.S. (until 14th February, 1936).

S. L. LAST, M.D. (Berlin), L.R.C.P., L.R.C.S., L.R.F.P.S. (from 23rd March, 1936).

Junior Assistant Medical Officer—

F. A. FRANK, M.B., Ch.B., L.M.S.S.A. (from 17th June, 1935).

Rushden House Sanatorium ;

Resident Medical Superintendent—

DR. J. H. CRANE.

Assistant Resident Medical Superintendent—

H. O. SWEDE, M.B., Ch.B. (from 3rd March, 1936).

School Medical Officers—

DR. J. M. MACKINTOSH.

J. PERRY WALKER, M.B., Ch.B. (Senior Assistant).

META J. NEWTON, M.B., Ch.B.

DR. I. J. JONES.

DR. H. ROGER.

DR. J. A. ROUGHEAD (from 1st June, 1936).

School Oculist—

DR. J. PERRY WALKER.

Dental Surgeons (School)—

P. B. CAMPION, L.D.S. (Senior Dentist).
 W. G. C. HACKMAN, L.D.S. (until September, 1935)
 A. E. CLARKE, L.D.S. (until 29th February, 1936).
 MISS M. HOOPER, L.D.S.
 A. J. C. MCINTOSH, L.D.S.
 G. MOODY, L.D.S. (from 1st November, 1935).
 J. G. JONES, L.D.S. (from 16th March, 1936).

Inspectors under the Sale of Food and Drugs Acts—

F. CAULTON (Chief Inspector). Southern Division.
 A. E. WALLER. Northern Division.

Superintendent Health Visitor—

MISS A. E. ROBINSON.

County Health Visitors—

MISS M. E. WHITEHOUSE.
 MISS F. M. SHARPE.
 MISS S. L. WILKINS.
 MISS M. H. PANTON.
 MISS S. J. DEVERS.
 MRS. H. M. BOVILLE.
 MISS M. H. MEADLEY.
 MRS. E. FORD (temporary).
 MISS D. B. PREWETT.
 MISS G. B. B. MILLGATE.
 MISS R. H. CROMPTON.
 MISS M. M. C. MILNE.
 MISS K. P. GREEN.
 MISS M. A. CLARK.
 MISS S. H. BUCHANAN.
 MISS E. K. DENNISON (until 30th September, 1935)
 MISS L. H. WAUGH (from 1st October, 1935).

Matron of Rushden House (Tuberculosis) Sanatorium—

MISS H. WILLIAMS.

Tuberculosis Nurse—

MISS M. E. DASHWOOD.

Mental Welfare Worker—

MISS K. M. HOBBS.

Laboratory Assistant—

MISS M. P. SMITH.

Clerical Staff—

T. MOSSEY (Chief Clerk).
 P. J. CHAMBERLAIN.
 S. E. BIERTON.
 F. D. CHAMBERLAIN (deceased 12th October, 1935).
 R. J. BRUCE.
 E. PRIOR.
 S. HARRIS.
 J. E. PACK.
 P. H. J. WILKINSON (from 1st November, 1935).

(b) **Part-time Officers of the Authority and others discharging duties for the Authority.**

The following changes have taken place since the issue of my Annual Report for 1934 :—

District Medical Officers of Health.

Brackley Borough and Rural District—

DR. IVOR J. JONES, County Health Department, from 1st July, 1935, *vice* GERALD N. STATHERS, M.B., B.S., resigned.

Urban Districts of Burton Latimer, Desborough and Rothwell, and Kettering Rural District—

DR. J. A. ROUGHEAD, Assistant County Medical Officer of Health, Kettering, as from 1st June, 1936, to succeed the following part-time Officers :—

A. P. KINGSLEY, M.B., Ch.B.
W. E. LOCK, M.R.C.S., L.R.C.P.
G. F. P. GIBBONS, O.B.E., M.B., B.S.
L. W. DRYLAND, M.R.C.S., D.P.H.

Oundle and Thrapston Rural District—

A. MCINNES, M.B., D.P.H., Raunds, from 1st April, 1936, for the whole district on the resignation of A. F. ELLIOTT, B.A., B.C., M.B., Medical Officer of Health for the former Oundle Rural District.

Consequent on the absorption of the following areas into other County Districts, the appointments of their District Medical Officers of Health were terminated during the year :—

Finedon Urban District—	F. K. BEAUMONT, M.B., Ch.B.
Easton-on-the-Hill Rural District—	W. A. HAWES, M.B., B.S., D.P.H.
Gretton Rural District—	J. E. O'CONNOR, M.D., Ch.B., B.A.O., D.P.H.
Oxendon Rural District—	C. T. SCOTT, M.A., M.D., Ch.B.
Potterspury Rural District—	A. H. HABGOOD, D.S.O., B.A., M.B., Ch.B., D.P.H.

District Medical Officers under Poor Law Acts.

Brixworth Guardians' Area—

A. S. M. DOUGLAS, M.R.C.S., L.R.C.P., Welford, as from 1st March, 1936, for the parish of Welford, *vice* N. GLOVER, B.A., B.M., Ch.B., resigned.

Public Vaccinators.

Brixworth Guardians' Area—

DR. A. S. M. DOUGLAS, Welford, as from 1st March, 1936, for the parish of Welford, *vice* DR. N. GLOVER, resigned.

Towcester Guardians' Area—

DR. G. N. STATHERS, Brackley, as from 1st October, 1935, for the Borough of Brackley and parishes of Evenley, Helmdon, Hinton-in-the-Hedges, Radstone, Syresham, and Whitfield, *vice* M. L. KREITMAYER, M.R.C.S., L.R.C.P., resigned.

In addition to the above, as a result of the alteration of County Districts, certain minor changes have been made in the areas of the following :—

J. RICKARDS, M.C., M.B., Aynho.
A. A. HOPE, M.B., B.S., Byfield.
J. G. MURRAY, L.R.C.S., L.R.C.P., Blakesley.
L. J. BARTLETT, M.R.C.S., L.R.C.P., Cropredy.

Vaccination Officers.

In view of certain amalgamations of parishes effected by the County of Northampton Review Orders of 1935, and of the consequent alterations in Relief Districts made in March, 1935, certain minor modifications have been made in Vaccination Officers' Districts.

Consulting Obstetrician.

R. WATSON, F.R.C.S. (Edin.), M.C.O.G., Northampton, from 16th January, 1936, *vice* C. C. HOLMAN, F.R.C.S., Northampton (temporary).

NORTHAMPTONSHIRE COUNTY COUNCIL,

COUNTY HEALTH DEPARTMENT,
GUILDHALL ROAD,
NORTHAMPTON.

JULY, 1936.

To the Chairman and members of the Northamptonshire County Council.

MR. CHAIRMAN, MY LORDS, MISS CARTWRIGHT AND GENTLEMEN,

I have the honour to submit the Thirty-ninth Annual Report of the Medical Officer of Health for the Administrative County of Northampton.

The first part of this report, which deals with Rural Housing, is published as a separate volume.

I have the honour to be,

Your obedient Servant,

J. M. MACKINTOSH,
County Medical Officer of Health.

SECTION A.

Statistics and Social Conditions.

1(a). GENERAL STATISTICS FOR THE YEAR 1935.

Area of the Administrative County	*578,947 acres
Population (Census 1921)	211,509
(Census 1931)	217,133
(Estimated resident, middle of 1935)	216,200
Number of inhabited houses (Census 1921)	50,538
(Census 1931)	57,047
Number of families or separate occupiers (Census 1921)	52,286
(Census 1931)	58,964
Rateable Value (April 1st, 1935)	£1,026,714
Actual produce of a penny rate 1934-1935 (whole area)	£3,926-15-8

* Subsequent to the extension of the boundaries of the County Borough of Northampton, on April 1st, 1932.

1(b). VITAL STATISTICS.

	TOTAL	MALE	FEMALE	BIRTH-RATE
Live births (Legitimate)	2,777	1,436	1,341	13.32
„ „ (Illegitimate)	104	53	51	

Rate per 1,000
Total (Live and
Still) Births.

Still-births	113	62	51	37.74
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DEATH-RATE

Deaths	2,707	1,419	1,288	12.52†
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Rate per 1,000
Total (Live and
Still) Births.

Deaths.

Deaths from puerperal causes :—

Puerperal sepsis	6	2.00
Other puerperal causes	6	2.00
Total	12	4.00

† See next page.

Death-rate of infants under one year of age :—

All infants per 1,000 live births	50.67
Legitimate infants per 1,000 legitimate live births.....	50.41
Illegitimate infants per 1,000 illegitimate live births	57.69
Deaths from (a) Measles (all ages).....	—
(b) Whooping Cough (all ages)	10
(c) Diarrhoea (under 2 years of age)	6

As compared with the year 1934, the birth-rate is higher by 0.8 per 1,000 of the population, and the death-rate is lower by .09.

The birth-rate exceeded the death-rate by .08 per 1,000 of the population.

The seven chief causes of death accounted for 60.4 per cent. of the total deaths, and are led by heart disease (22.1 per cent.), cancer (13.0 per cent.), cerebral haemorrhage (6.2 per cent.), other circulatory diseases (5.3 per cent.), pneumonia (4.8 per cent.), senility (4.6 per cent.), tuberculosis of respiratory system (4.4 per cent.). The causes of death occupy the same relative positions as in the year 1934.

The number of deaths associated with childbirth is, I am pleased to report, appreciably lower than in 1934 ; the infant mortality rate also shows a decrease on that of the previous year.

†*Nett Death-Rate.*

Comparability Factors for each Urban and Rural District, and for the Administrative County as a whole, have been issued by the Registrar-General for adjusting the local death-rates for the purposes of comparison with recent years and with the crude death-rate for England and Wales.

The factor in each case may be said to represent the population handicap to be applied to the area, and, when multiplied by the crude death-rate experienced in the area, modifies the latter so as to make it comparable with the crude death-rate for the country as a whole, or with the similarly adjusted death-rate for any other area.

The factor for the Administrative County is .87, and this gives a nett County death-rate of 10.8, as against a crude death-rate of 12.5, and as against 11.7 for England and Wales. This death-rate of 10.8 is the rate which, it is assumed, would be arrived at if the age and sex constitution of the population of Northamptonshire was distributed in the same proportion as that of England and Wales as a whole.

SECTION B.

General Provision of Health Services.

1. Laboratory Facilities.

General laboratory facilities, including Wassermann tests, are available at the Pathological Department of Northampton General Hospital.

The County Council has a small laboratory at 18, Guildhall Road, which is equipped for the examinations required by the Tuberculosis Officer, and for investigations in connection with milk supplies, water, pollution of rivers and streams, etc. A whole-time Laboratory Assistant is employed, who has also had training in the inspection of dairy farms.

The following is a synopsis of the work carried out in the Laboratory during the year 1935 :—

No. of milk samples examined (bacteriologically)	1,346
No. of water samples examined (bacteriologically).....	119
No. of water samples examined (chemically)	20
No. of water samples examined (oxygen absorbed test)	6
	<hr/>
	1,491
	<hr/>

In the previous year a total of 760 samples was reached, and in the year 1933, 459 samples were examined.

MILK.

Of the 1,346 samples of milk examined, 12 were “ Certified ” milk, examined on behalf of the Ministry of Health, 841 were submitted by District Councils or Dairies, 44 were taken from School supplies, and the remainder (449) were either submitted or taken in connection with the Accredited Producers Scheme (see p. 11).

Certified Milk.—All the samples examined were in conformity with the standard laid down in the Milk (Special Designations) Order, 1923.

Samples from District Councils, etc.—The following table shows the classification of samples in this group, and enables comparison to be made with previous years. In this group, all samples reaching Grade A. standard are classed as “ Good,” whilst those below that standard are designated “ Moderate ” or “ Bad ” as the case may be.

	1935		1934		1933		1932	
	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
GOOD	647	76.9	426	62.3	270	61.7	300	60.6
MODERATE	148	17.6	140	20.5	73	16.6	80	16.2
BAD	46	5.5	118	17.2	95	21.7	115	23.2
	<hr/>							
TOTAL	841	—	684	—	438	—	495	—
	<hr/>							

It will be seen by this table that the percentage of samples classed as “ Good ” is considerably higher than in any of the past three years ; the percentage of “ Moderate ” samples has remained more or less stationary, but the greatest improvement is to be seen in the “ Bad ” category, the percentage having been reduced steadily in four years from 23 to 5.5.

School Supplies.—44 samples of milk taken from supplies to school children were examined during the year under review. These are classified in the following table. The standards used are the same as those for District Council samples.

GOOD	31 or 70.5%
MODERATE	7 or 15.9%
BAD	6 or 13.6%

ACCREDITED PRODUCERS SCHEME.

Following negotiations with the County Councils Association, the Milk Marketing Board prepared a Scheme to Establish a Roll of Accredited Milk Producers, to take effect from 1st May, 1935. This scheme provides for the payment of a bonus or premium of 1d. per gallon to milk producers duly registered on the Roll. Participants in the Scheme must submit to the Board a licence, granted by the appropriate authority, to produce milk under the designation of "Grade A."

The Northamptonshire County Council agreed to co-operate with the Milk Marketing Board, and instructed me to arrange for the carrying-out of the necessary inspections and examination of the milk produced. The applicant for a Grade A. licence bears the cost of the initial veterinary inspection of his dairy herd, and also pays the fee for the bacteriological examination of a sample of milk. After the licence has been granted, quarterly inspections of the milch cows, and periodical examinations of the milk produced, are carried out free of charge to the licensee.

During the year, members of my Staff made inspections of the premises and methods of production of 256 cowkeepers, and at the end of the year, there were 165 Grade A. licences in force.

Of the 449 samples of milk examined in connection with the Scheme, 304 were submitted by or taken from applicants for licences, and 145 were "Routine" samples, *i.e.*, taken after licences have been granted.

The following table shows the numbers and percentages of samples, taken before and after granting of licence, which were up to or below the standard for Grade A. milk, as laid down by the Milk (Special Designations) Order, 1923.

	<i>Up to Grade A. Standard.</i>		<i>Not up to Grade A. Standard.</i>	
	<i>No.</i>	<i>Per cent.</i>	<i>No.</i>	<i>Per cent.</i>
Samples submitted by, or taken from applicants for licences	229	75.3	75	24.7
"Routine" samples, <i>i.e.</i> , taken after licences granted	123	84.8	22	15.2
TOTAL	352	78.4	97	21.6

Of the *total number of samples of milk from all sources* (1,346), 1,042 or 77.4% were of Grade A. (or higher) standard, and 304, or 22.6%, were below that standard.

WATER.

The number of samples of water examined, bacteriologically and chemically, has increased greatly, being 139 against 40 for the year 1934.

The samples were submitted by District Councils, and by Engineers engaged in investigating new water resources on behalf of various Rural Districts. In addition, samples of water from several School supplies were examined.

The six samples of water examined by "oxygen absorbed test" were taken in connection with the twice-yearly Survey of the Rivers Avon and Arrow, carried out under the auspices of the Ministry of Agriculture and Fisheries. Other samples taken in connection with this Survey are sent to the Government Chemist, who reports on them direct to the Ministry of Agriculture and Fisheries.

2. Local Government Act, 1929.

PUBLIC ASSISTANCE INSTITUTIONS.

The pressure upon sick-bed accommodation, especially at Kettering and Wellingborough, has been continuous. Plans are in course of preparation for considerable extensions at the Kettering Institution; the scheme includes wards for the sick, additional accommodation for nurses, and special provision for maternity cases and infants.

At Wellingborough Institution proposals for the construction of a new sick block have been approved by the Council, and the buildings are now in course of erection.

The following table shows the existing accommodation at the County Institutions, and the number of beds occupied during the week ended 30th May, 1936 :—

ACCOMMODATION AT INSTITUTIONS AND BEDS OCCUPIED DURING WEEK ENDED 30TH MAY, 1936.

	SICK WARDS.					
	<i>Males.</i>		<i>Females.</i>		<i>Children.</i>	
	No. of Beds. 30/5/36	No. of Inmates 30/5/36	No. of Beds. 30/5/36	No. of Inmates 30/5/36	No. of Beds. 30/5/36	No. of Inmates. 30/5/36
Daventry	57 (a)	55	62	56	12	8
Kettering	106	106	75	59	7	4
Oundle	30 (a)	23	30 (a)	27	2	—
Wellingborough	59	69 (b)	113	108 (c)	5	7
	252	253	280	250	26	19

Notes—(a) a number of sick beds in the Daventry and Oundle Institutions can be used for males or females according to requirements.

(b) including 19 men sleeping in ordinary wards who should be in sick wards.

(c) including 1 woman sleeping in ordinary ward who should be in sick ward.

	OTHER WARDS.					
	<i>Males.</i>		<i>Females.</i>		<i>Children.</i>	
	No. of Beds.	No. of Inmates	No. of Beds.	No. of Inmates	No. of Beds.	No. of Inmates.
Daventry	86	55	36	24	—	—
Kettering	70	53	37	29	16	5
Oundle	43	30	38	13	4	—
Wellingborough	99	77 (a)	70	56 (b)	3	4
	298	215	181	122	23	9

Notes—(a) excluding 19 men sleeping in ordinary wards who should be in sick wards.

(b) excluding 1 woman sleeping in ordinary ward who should be in sick ward.

3. Maternity and Child Welfare.

This section of the report, in so far as it deals with Midwives and Maternity and Nursing Homes, refers to the whole Administrative County. The Urban District of Kettering is a separate Maternity and Child Welfare Authority, and details of its Child Welfare work will be found in the Report of the Medical Officer of the Urban District.

(i) NURSING IN THE HOME.

Under an agreement between the County Council and the County Nursing Association for the provision of special nurses in certain cases of infectious disease, four cases of puerperal fever, nineteen of puerperal pyrexia, twenty-five of infantile diarrhoea, twenty-one of measles, and seven each of ophthalmia neonatorum and whooping cough, were nursed in the home. Nursing care was also given in a number of other cases not strictly provided for in the agreement.

(ii) MIDWIVES.

The Inspector of Midwives and her staff made the following visits of inspection :—

Routine inspections	396
Special investigations	174

The midwives attended 77.99 per cent. of the total births in the County—56.49 per cent. as midwives and the remainder as maternity nurses.

The number of midwives practising in the area at any time during the year was 152 ; on December 31st, 122 remained in practice.

No uncertified person was reported as having practised during the year.

Medical Aid to Midwives. During the financial year, the midwives notified that they had called in medical aid in 475 cases, and 301 claims for payment of fees were made by medical practitioners whose assistance had been sought, 2 of which were subsequently withdrawn, as against 457 notifications and 272 claims, 4 of which were subsequently withdrawn, in the previous year. 2 claims were also brought forward from the previous year, and 3 of these received in 1935-36 will be dealt with in the following year. The patients or persons responsible were approached by the County Medical Officer of Health, and 80 paid or undertook to pay the practitioner's account in full. The circumstances of 195 cases were considered by the Standing Sub-Committee of the Public Health, etc., Committee, who instructed steps to be taken to recover from the patient or person responsible the whole of the fee in 92 cases, and such part of the fee as seemed reasonable in view of the family's income in 50 cases. In 53 cases they decided to make no claim against the family. 23 other cases were in connection with babies suffering from ophthalmia neonatorum ; no claim on the family is made in such cases.

Educational and Social Work. Lectures were given at the local Queen's Institute of District Nursing on the rules of the Central Midwives Board and the relation of the midwife to the Local Supervising Authority. The Midwives' Union continued its activities ; ten lectures were arranged, all of which were well attended and appreciated by the members.

(iii) MATERNITY AND NURSING HOMES.

The number of homes on the register during the year was 10, and 13 visits of inspection were paid by the Medical Officers. In addition, 2 inspections were made to midwives in Kettering and District General Hospital and Kettering Public Assistance Institution.

No application for delegation of powers to a County District was received under section 9 (2) of the Act of 1927.

Further particulars regarding the Nursing Homes in the County are given in the Statistical Section of the report.

(iv) MATERNAL MORTALITY (excluding Kettering U.D.).

The Registrar-General reported 11 maternal deaths. In addition to these there were three deaths of pregnant women—one from rheumatism, one from hepatic degeneration, and one from acute capillary bronchitis. Six of the eleven deaths were due to sepsis; in one case the nurse was suspected of being the source of infection; in two cases the patients lived elsewhere, and came to the district in which they were confined just in time for the confinement, so that no ante-natal work was done.

The five other deaths were—(1) Pernicious anæmia; (2) Placenta prævia; (3) Eclampsia; (4) Obstetric shock after surgical induction and craniotomy for hydrocephalus; (5) Internal hæmorrhage.

All but one died in institutions. The death-rate per thousand live and still births was 4.33.

A Scheme for the improvement of the Maternity Service was brought into operation during the year, and the following additions to the services available were made:—

(1) *Contribution to midwives' fees.* In order to encourage the use of trained midwives along with doctors; if the doctor notifies the Health Department that he has been engaged and that the patient is not in a position to pay a midwife as well, contribution can be made towards the midwife's fee.

(2) *Compensation to a midwife for loss of a case.* When an independent midwife brings a case to the ante-natal centre and the patient is, on examination, found to require hospital care, compensation can be paid to the midwife who continues her ante-natal care till the case goes to hospital.

(3) *An increase in the length of time for which necessitous expectant mothers may receive free milk* was agreed to.

(4) *Dental treatment* (by arrangement for the services of School Dentists) is now available both for expectant mothers and for children under school age. In the case of the mother, treatment may be completed after the birth of the child.

(5) *Ambulance expenses*, which were previously met by the patient, may now be paid in necessitous cases.

(6) *More generous treatment of Ante-Natal cases as regards medical fees.* In any case where the midwife in charge finds a doctor's services required during the ante-natal period, but thinks the patient unable to pay for this, she may recommend the case as one for special consideration.

(7) *Sterilized Maternity Outfits* are provided at cost price (four shillings), and can be obtained through the District Nurses, or by application to the Northamptonshire Nursing Association.

Puerperal Fever. Eleven notifications were received (excluding Kettering U.D.). Seven of these cases were treated in hospital; there were six deaths.

Puerperal Pyrexia. Twenty-two notifications were received (excluding Kettering U.D.). Five of the notified cases were treated in hospital; there were no deaths.

Following the death of the Consulting Obstetrician (Mr. W. Salisbury, F.R.C.S.) on 7th January, 1935, temporary arrangements were made for this service to be given by Mr. C. C. Holman, F.R.C.S., which were continued throughout the year.

In January, 1936, Mr. R. Watson, F.R.C.S. (Ed.), M.C.O.G., was appointed as Consultant Obstetrician for the whole of the Authority's area.

No charge is made to the medical practitioner or to the patient for Mr. Watson's services, but the scheme is applicable only to patients who cannot afford a consultant's fee. Application for these services should be made to the Health Department (Telephone: Northampton 2219), but, in emergency, can be made direct with Mr. Watson at his house, The Avenue, Cliftonville,

Northampton (Telephone: Northampton 3103), and the Health Department subsequently notified of the emergency.

Anti-streptococcal serum for the treatment of puerperal fever is provided free of charge for necessitous cases, and similar provision is made for the examination of pathological material. Applications for serum should be made to Northampton or Kettering General Hospitals. Pathological examinations are conducted at Northampton General Hospital only.

Hospital accommodation : Cases of puerperal infections may be admitted to the following hospitals, on the application of the medical practitioner to the Health Department :—

Northampton General Hospital ;
Kettering and District General Hospital ;
The Hospital of St. Cross, Rugby ;
Stamford, Rutland, and General Infirmary ;

according to the area in which the case occurs.

(v) OPTHALMIA NEONATORUM.

Eight cases were notified (excluding Kettering U.D.), all of which made a good recovery. All cases were visited by the Assistant Medical Officer.

CASES			VISION UN- IMPAIRED	VISION IMPAIRED	TOTAL BLINDNESS	DEATHS
NOTIFIED	TREATED					
	AT HOME	IN HOSPITAL				
8	7	1	8	—	—	—

Arrangements are made with Northampton General Hospital, the Hospital of St. Cross, Rugby, and the Stamford, Rutland, and General Infirmary for the admission of these cases, either with or without their mothers, and no charge to the parents is made for treatment.

(vi) MATERNITY HOSPITALS.

The County Council make provision, under arrangements with the voluntary institutions serving the County, for two classes of maternity cases :—

- (1) those in which the accommodation at home is unsuitable for the conduct of a confinement, and
- (2) those in which the confinement is likely to be abnormal.

Patients may be admitted to the following institutions :—

Kettering and District General Hospital ;
Northampton General Hospital ;
Stamford, Rutland, and General Infirmary ;
Warwickshire County Maternity Home ;
Market Harborough and District Hospital ;
Hospital of St. Cross, Rugby (abnormal cases only).

Cases are admitted only on the certificate of the County Medical Officer (except in emergency, when notification may be made to the Health Department after admission), and a patient is required to contribute towards the cost of maintenance an amount decided upon by the Standing Sub-Committee of the Public Health Committee after consideration of the financial circumstances of the family. The cases actually admitted during the year were :—

Kettering and District General Hospital	42
Northampton General Hospital	41
Stamford, Rutland, and General Infirmary	7
Warwickshire County Maternity Home	4
Market Harborough and District Hospital	1
Hospital of St. Cross, Rugby	5

(vii) CLINICS AND TREATMENT CENTRES.

At the end of the year, there were 24 Infant Welfare Centres in the County (including the Military Centre at Weedon), and 3 Ante-Natal Clinics.

For the third successive year, Rushden Infant Welfare Centre received the premier award (*viz.*, The Parentcraft Challenge Shield) in the National Parentcraft Competitions, gaining 587 marks out of a possible 600. The chief individual award, the Rhondda Mothercraft Shield, was also awarded to the Rushden Centre for the Mothercraft paper written by Mrs. Houghton, the Centre creating a record by winning both shields for two successive years. Wellingborough Infant Welfare Centre again obtained third place, with 528 marks, in the National Parentcraft Competitions, and received the silver medal. Members of Rushden, Wellingborough, Cold Ashby and Welford, Earls Barton, Irchester, and Wollaston Infant Welfare Centres were highly placed in the competitive examinations; in addition, non-competitive certificates were awarded to members of Rushden and Higham Ferrers Centres. A meeting of representatives of all County Infant Welfare Centres and others was held in the County Hall on 19th July, 1935, when Miss B. A. Cartwright, C.B.E., J.P., presided; and trophies and certificates were presented by Dr. Hazel H. Chodak Gregory, of London.

The three Ante-Natal Centres mentioned above are at Wellingborough, Northampton, and Byfield. The number of expectant mothers who attended these centres during the year was 101, and they made 175 attendances. In addition, expectant mothers from County areas attend Ante-Natal Clinics belonging to the Kettering Urban District Council, the Banbury Town Council, and the Warwickshire County Council at their Rugby Maternity Home. 175 attendances were made by 57 mothers at these Clinics during the year.

From September onwards the Byfield Ante-Natal Centre was open on the morning of the first Tuesday in each month, the number of cases having become too great to be seen on the Infant Welfare Centre afternoon.

Dental treatment is provided for Ante-Natal patients attending the Kettering Clinic, 8 cases receiving attention during the year.

Details with regard to attendances at Infant Welfare Centres are given in the statistical section of the report.

The clinics organised by the Manfield Orthopædic Hospital were continued during the year, with the addition of a new clinic at Byfield, which was started in October with a view to providing for the treatment of patients resident in Byfield, Woodford Halse, and surrounding villages who found it difficult to attend existing clinics. Ten children under five years of age were admitted as County Council patients to Manfield Hospital.

Twenty-five children suffering from orthopædic defects were visited by the Assistant Medical Officer and referred to the clinics for treatment.

(viii) MILK GRANTS.

A free supply of milk was granted to infants, expectant and nursing mothers, in 839 cases. In each of these cases the financial circumstances of the family were considered by the Standing Sub-Committee of the Public Health Committee.

(ix) HEALTH VISITING.

No change in number took place in the Health Visiting Staff during the year. The following is a short summary of the work of the Health Visitors (excluding school nursing) :—

Ante-natal visits	247
Infants and children (visits)	45,723
Stillbirth and death inquiries	205
Mental Defectives (visits)	384
Tuberculosis visits	1,689
Social, etc., visits	1,069
Boarded-out children (visits)	1,560
	<hr/>
Total visits	50,877
	<hr/>

In addition, the Health Visitors made 472 attendances at the Infant Welfare Centres and gave 137 lectures to the mothers.

(x) INFANT LIFE PROTECTION.

The Health Visitors have continued visitation under Part I. of the Children Act, 1908, and the Children and Young Persons' Act, 1932, and periodical reports have been received upon cases under their supervision. At the end of 1935, 143 foster-mothers and 193 children were on the register. During the year, 94 children were removed from the County, 27 were returned to the care of parents or relatives, 4 were removed to Public Assistance Institutions in the County, 2 were legally adopted, 1 died, and in 42 cases supervision was discontinued on the child reaching the age of nine years. 1,144 visits were paid by the Health Visitors during the year. All reports are reviewed by the medical staff, and prompt measures are taken to investigate any case in which an adverse report is received.

(xi) MENTAL DEFICIENCY ACT, 1913.

Over 700 home visits were paid by the Mental Welfare Officer to cases under Statutory and voluntary supervision, and to feeble-minded children who had left the elementary schools. In addition, 276 interviews took place in connection with cases; 7 cases were escorted to institutions; 7 girls and boys received instruction in rug-making; and a number of special investigations were made for the Board of Control, the Ministry of Pensions, and voluntary organisations. 336 cases were under supervision at the end of the year. The Assistant Medical Officer visited 21 cases.

(xii) UNMARRIED MOTHERS.

The Public Health Committee has authorised the Standing Sub-Committee to consider applications from the Peterborough Diocesan Moral Welfare Association for contributions in respect of the cost of treatment of unmarried mothers, and to settle provisionally the payments to be made by the County Council on account of the maintenance of the cases in suitable Homes, subject to the amounts thereof being reported to, and confirmed by, the Committee. Wherever possible, applications for contributions towards the cost of maintenance in the Homes are made to the Council prior to the admission of the cases, in order that suitable enquiries may be made on behalf of the Council into their financial circumstances. Unmarried expectant mothers who are destitute are dealt with by the Public Assistance Committee. Eleven cases were admitted to Homes during the year under arrangements of the Public Health Committee.

(xiii) CO-OPERATION WITH N.S.P.C.C.

In cases of neglect, etc., when visits of the Health Visitor fail to have any effect, the National Society for the Prevention of Cruelty to Children is called in and their Officer takes the cases

up. Eleven cases were so referred during 1935. The number of children concerned was thirty-two, and seventy-six visits were made by the Inspector. The Officer does not in any case divulge the source of his information, and he reports progress and discusses possible solutions of difficulties at regular intervals. This is a most useful form of co-operation.

(xiv) PREVENTION OF DEAFNESS AND DEAF-MUTISM.

In response to a circular from the Ministry of Health on this subject (1337a), a scheme was approved whereby (a) children under five years referred by medical practitioners would be seen by the aurists connected with Northampton General Hospital and Horton General Hospital, Banbury, at a fee of three shillings per attendance ; (b) operative treatment for the removal of tonsils and adenoids would be paid for at a fee of one guinea per case up to one hundred in one year and £1 per case in respect of any number in excess of one hundred, and payment to the hospital of seven shillings and sixpence in respect of one night's maintenance and five shillings per night after the first night (such charge not to be made where the parents are contributors to a hospital scheme) ; (c) District Nursing Associations would be paid five shillings per case per annum in respect of infants suffering from ear defects nursed by them provided the District Nurse has attended at hospital for instruction in the treatment of such cases.

The scheme as regards children under five years suffering from ear disease is working at Banbury ; T. F. Briggs, Esq., F.R.C.S., sees cases at the Ear, Nose, and Throat Clinic at the Horton General Hospital on the first Tuesday of each month at 2 p.m., on reference by a doctor. At Northampton General Hospital such cases may be referred to E. Broughton Barnes, Esq., F.R.C.S., in the usual way.

The following are the hospitals to which children under five may be referred for tonsil and adenoid operation :—Northampton General Hospital ; Hospital of St. Cross, Rugby ; Horton General Hospital, Banbury ; Stamford, Rutland, and General Infirmary. Six cases have been referred for operation, one to Stamford Infirmary and the others to Northampton General Hospital.

The Nurses came into Northampton or Banbury according to their area, and received the necessary instruction. A grant was subsequently made towards the expenses of providing for nurses' areas temporarily, and of travelling.

One deaf mute was admitted to the Royal School for Deaf and Dumb Children, Margate, and good reports of his progress are received.

(xv) DENTAL TREATMENT AND DEFECTIVE VISION.

During the year, 17 expectant mothers and 48 children under five years of age who required dental treatment, and 53 children under five who required examination for defective vision, were referred to the Staff of the School Medical Department.

(xvi) OBSTETRIC FACILITIES.

As stated earlier, under the heading of Puerperal Pyrexia, temporary arrangements were made for consultations to be given by Mr. C. C. Holman, F.R.C.S., after the death of Mr. W. Salisbury, F.R.C.S., on 7th January, 1935. Ten cases were seen during the year.

(In January, 1936, Mr. R. Watson, F.R.C.S. (Ed.), M.C.O.G., was appointed Consultant Obstetrician for the whole of the Authority's area, and his services are available to medical practitioners in cases of abnormality of pregnancy and in puerperal cases. Request is made through the Health Department (Telephone: Northampton 2219), or, in emergency, direct by the medical practitioner to the Consultant (Telephone: Northampton 3103) ; in the latter case, the Health Department should be notified immediately afterwards.)

(xvii) CONTRACEPTION CLINIC.

The clinic of the Northampton Women's Welfare Association is held in the Infant Welfare Centre premises in Dychurch Lane, Northampton, on the third Thursday of each month, from 6.30 to 8.30 p.m., and on the fourth Thursday from 6.30 to 7.30 p.m. Appointments may be made for the attendance of suitable cases on application to Dr. M. Hendrie, 443, Abington Park Parade, Northampton, enclosing the necessary medical certificate stating the condition for which the advice is required. Appliances must be paid for by the patient. 34 County cases were seen during 1935.

SECTION C.

Sanitary Circumstances of the Area.

1. WATER SUPPLY.

When this report went to press, only 11 Reports of District Medical Officers of Health had been received. The following notes on water supplies have been extracted from the available reports.

Daventry Borough. There have not been the difficulties over the supply as in the previous year. The increased rainfall has helped matters considerably, and the additional works put in during 1934 has also been of great assistance ; I have heard little complaint of any shortage.

Desborough Urban. The drought, which had been experienced since 1933, continued up to the end of August. The springs at No. 2 station did not have a chance to recover their normal yield. Consequently, the new supply at Pipewell, brought into operation in October, 1934, proved invaluable. Without this, the supply of water would have had to be curtailed. The total yield from all supplies did not fall below 83,000 gallons per day. This was sufficient for the requirements of the district, although during the summer months there was little to spare.

Samples of water taken for bacteriological examination during the year were reported as being satisfactory.

Kettering Urban. After the difficult situation which arose in 1934 as a result of the serious water-shortage, it is gratifying to report that a full and sufficient supply has been available since the 4th March, 1935.

117,000,000 gallons of water were obtained from the Harrington supply during the early months of the year. Notwithstanding the rainfall being only 1.41 inches below the average, at the end of September a serious situation would have again arisen had not this supply been available.

During the latter months 67,570,000 gallons of water were obtained from the same source, and both reservoirs were overflowing in December. The rainfall during the last four months was 1.81 inches above the normal for that season of the year.

In order to meet the needs of an expanding district and to encourage industrial development, it is felt that additional storage accommodation will be required in the future. The local authority are giving special attention to this matter, and exploring further channels with a view to improving the town's water-supply.

Extensions of mains have been made to new Estates.

Samples of water from the town's mains were taken regularly, and the reports were very satisfactory.

Raunds Urban. Stanwick received the Raunds Water Supply towards the end of the year, and Hargrave, in the Oundle and Thrapston Rural District, will shortly be supplied from the same source. Analysis of the town's supply proved the water to be satisfactory.

Wellingborough Urban. Wellingborough Town supply was again ample and very satisfactory, but at Finedon the supply was not too abundant. It is intended to supplement the latter by joining up with the Orlingbury Supply.

Daventry Rural. Most of the villages in the District depend for their water-supply on wells and springs, and as the majority of the wells are shallow, must be regarded as doubtful

sources for a domestic supply. These facts, and the dry weather of the last few summers, brought the subject of the water-supply of the District prominently before the local authority during the year, and the question of a pure supply to a large number of parishes was considered.

On January 4th an Inquiry was held by the Ministry of Health at West Haddon regarding the formation of a Regional Scheme for the supply of water from springs on the north side of the village, to supply West Haddon itself; and several of the Parishes in the area that formed the Crick Rural District, and to be known as the Northern Scheme.

On September 12th, an Inquiry was held by the Ministry in Daventry for permission to borrow : (1) £26,500 for carrying out the Northern Scheme ; (2) £20,000 for increasing the present Long Buckby supply, and to be known as the Southern Scheme, so that by gravitation other villages in the District can have a good supply of water ; and (3) £11,300 for a water supply for the parishes of Weedon and Flore.

On November 27th, another Inquiry was held by the Ministry in Daventry for permission to borrow the sum of £6,400 for a Water Scheme for the parishes of Byfield and Charwelton, and also the sum of £3,800 for a water-supply for the parish of Staverton, but this last scheme was not approved by the District Council.

Kettering Rural. The water-supply at Corby has been augmented by linking up the new spring from Little Oakley. A scheme for supplying Broughton has been completed.

Northampton Rural.

Bugbrooke and Upper Heyford.—The carting of drinking water to the Council houses in these Parishes, started in August, 1934, ceased in October of this year, when at Bugbrooke a small scheme of an electric pumping-plant and elevated reservoir was completed, taking water from a deep well and piped to stand taps at the rear of the thirty existing houses. This scheme will also supply the twenty new Council houses in course of erection.

At Upper Heyford, arrangements were made with Earl Spencer for an extension of his supply, and in this case taps were placed in the kitchen of each house.

Cogenhoe and Great Houghton.—Each of these parishes is still in need of a public supply.

Nether Heyford.—A small electric pumping-plant and elevated reservoir were put down here to supply the existing 16 Council houses and the 12 new Council houses, a tap being put in the kitchen of each house.

Roade.—A comprehensive scheme for this village was decided upon, the proposal being to take a supply from the well supplying Hartwell and Ashton. The complete plans and details were submitted to the Ministry of Health, and a public inquiry is to be held early in 1936. A Government Grant of £1,250 has been provisionally allocated to the scheme.

Great Billing.—The Council having decided to go on with a scheme, the proposal is to request the Northampton Corporation to extend their mains, and the matter is still under negotiation.

Duston.—No improvement in the condition or terms of supply has yet taken place.

Wootton.—A complete scheme for this village was decided upon, the plans and details being submitted to the Ministry. A grant of £400 has been provisionally allocated by the Government, and the public inquiry is expected to take place early in 1936.

Harpole.—The new scheme in this village was duly completed towards the end of the year, and some 98% of the houses have the supply laid on to the premises, this including the whole of the 30 Council houses.

Hackleton.—In August, at the request of the Parish Council, a scheme was formulated at an estimated cost of £3,915, to supply Piddington and Hackleton, and submitted to the Ministry of Health. A grant of £500 had been promised by the Government, and it is hoped that the scheme will soon come to fruition.

Hardingstone.—Shortage of supply was felt at Hardingstone during the summer, and for three months consumption had to be curtailed. Plans for adding to the existing supply, by utilizing the bore-hole recently sunk at the well site, have been drawn up. These include new pumping-plant, pump-house, and 50,000 gallon reservoir, at an estimated cost of £990. These details are now waiting the approval of the Ministry of Health.

Kislingbury.—This supply has continued satisfactorily, and some twenty new houses being built on the Weedon Road (Harpole Parish) have been connected to the supply. Owing to the low pressure in higher parts of the village, plans for improving this have been submitted to the Ministry of Health. The estimated cost is £400, and approval is awaited.

Brafield-on-the-Green.—During the year, trouble has occurred on two occasions owing to mains leakage, which have taken some time to trace. When this happens it is very difficult to keep up sufficient supply from the well. Also, the addition of the 24 new Council houses and other new property will accentuate this difficulty. The Council have therefore decided to find means of augmenting the supply, and the matter is in hand.

Yardley Hastings.—Plans for taking over the village supply from the Compton Estates Company were approved, also for extending the mains and construction of a new reservoir. This work is in the hands of Mr. J. B. Williams, Daventry.

Oundle and Thrapston Rural. The heavier rainfall of the end of 1934 and of 1935 gave relief to the scarcity of the two previous years. There was no shortage in any district.

Woodford Regional Scheme.—This is intended to supply Great Addington, Little Addington, Ringstead, and Denford. The work of laying the mains has made good progress during the year. The scheme is expected to cost £14,500.

Hargrave, which is on the road between Raunds and St. Neots, will tap the proposed Raunds—St. Neots supply as this passes through the village. The agreement for this supply is between the St. Neots Rural District and the Oundle and Thrapston District. The cost is likely to be about £50 per year. The laying of mains was begun towards the end of the year.

Chelveston.—Like Hargrave, this village is separated from the rest of the district by Raunds Urban District. The Raunds main at the old Raunds—Stanwick boundary is just about $1\frac{1}{4}$ miles from Chelveston green. Raunds reservoir is at a height of 265 feet O.D., and the highest part of the road between Raunds water main and Chelveston is 239 feet O.D. Chelveston itself is 185—200 feet O.D. Allowing a fall of 7 feet head for friction in the pipes, which has been calculated to be a maximum, and also allowing for the depth of the pipes in the ground, there should be sufficient head to get a piped water-supply to Chelveston from the nearest source without a water tower.

Titchmarsh.—The proposal to supply Titchmarsh from the Thrapston reservoir has not yet taken definite shape. This village has only one public deep well, situated in North Street, all the others being shallow or private wells. None of the wells can be considered to be free from the possibility of contamination.

Barnwell, Clapton, Hemington, Luddington, Lutton, Polebrook, and Thurning.—A regional scheme to supply these parishes with a piped supply of water from a well sunk in the river gravel in the neighbourhood of Barnwell was considered in 1935. An enquiry on a proposal to borrow £14,250 for this purpose was held at Oundle on September 11th, 1935. This scheme has now been extended to include Warmington at a proposed increased cost of £4,000.

Aldwincle.—There is at least one public well, but the supply is chiefly by private wells which are all shallow, the water being in some cases only three feet below the surface. It would seem that this village, also the village of Thorpe, could be best supplied by a continuation of the pipe-line from Titchmarsh when the water is taken there from Thrapston.

Easton-on-the-Hill, Kingscliffe, Apethorpe, Harringworth, Upper and Lower Benefield, Bulwick, Ashton, Lilford, Laxton, and Southwick, are the only parishes of the "added" district with a piped supply. With the exception of the supply at Easton and Kingscliffe all

are privately owned. All the other parishes of the "added" district depend on public or private wells.

Towcester Rural. Owing to the drought and consequent shortage of water, auxiliary supplies were put in at Abthorpe and Stoke Bruerne. They have considerably helped existing supplies.

Water was rationed in several parishes, and had to be carted daily to the Council Houses at Blisworth, and for a short period to those at Shutlanger. These emergency measures of supply provide only the minimum of requisite needs, and steps should be taken to augment the supply in these and several other parishes in the district.

At Blakesley, the existing supply has been so depleted that an auxiliary supply was found, and a scheme prepared and submitted to the Minister of Health.

The new supply for Deanshanger and Cosgrove was approved by the Minister of Health, and work was begun upon it about the beginning of October.

Samples of water from existing supplies from several villages, and from proposed new supplies, were analysed, and in five cases the water was pronounced unsafe for drinking purposes. In view of these results, the Council passed a resolution that steps should be taken to improve the water-supply, both in quantity and quality, throughout the district where necessary. An application was made to the County Council for the services of their Consulting Water Engineer, for the purpose of making an investigation throughout the district.

This investigation is still proceeding.

General.

During the past few years most of the District Councils have made remarkable progress in the provision of public water-supplies. The County Council has made full use of its statutory powers under Section 57 of the Local Government Act, 1929, by contributing towards the cost of approved schemes. Its efforts have been directed especially towards the encouragement of co-operation between Districts on a wide basis, by the promotion of regional schemes of supply. In order to stimulate action in surveying the needs of each area, the County Council offered to every District Council the expert services of Messrs. Pick, Everard, Keay and Gimson, of Leicester, and undertook responsibility for the whole cost of these district surveys.

It is gratifying to report that many Rural District Councils have taken advantage of these facilities, and that schemes are in course of preparation in the following areas :—

		<i>Estimated Cost of Scheme.</i>
DAVENTRY RURAL.	Barby, Crick, Kilsby, Lilbourne, West Haddon, Yelvertoft.	£26,500
	Weedon Bec, Flore.	£11,300
	Staverton.	£3,800
	Byfield, Charwelton.	£6,400
NORTHAMPTON RURAL.	Roade.	£5,503
	Wootton.	£3,277
OUNDLE & THRAPSTON RURAL.	Great Addington, Little Addington, Denford, Ringstead, Twywell.	£14,500

	Barnwell All Saints, Barnwell St. Andrew, Hemington, Luddington, Lutton, Polebrook, Thurning, Clopton, Warmington.	£18,250
	Hargrave.	£1,650
	Titchmarsh.	£3,150
TOWCESTER RURAL.	Silverstone.	£4,500
	Paulerspury.	£3,869
WELLINGBOROUGH RURAL.	Orlingbury, Little Harrowden.	£4,100
	Grendon.	£3,660

A survey has also been made of the villages in Brixworth Rural District, but apparently no action has been taken to carry out the Engineers' recommendations. This is greatly to be deplored, as many complaints are being received regarding the inadequate water-supplies in the area, particularly in the village of Brixworth.

2. RIVERS AND STREAMS.

Periodical inspections of rivers and streams were made by the medical staff, and where necessary, samples of water were taken for examination in the Council's laboratory.

Long Buckby. Inspections were made on the 8th and 15th April, of the ditches and streams in the neighbourhood of the village of Long Buckby. On the north side of the village there are several ditches which carry away crude sewage from many of the houses in West Street, Church Street, West Haddon Road, and The Banks, and these ditches drain into a stream running almost due west as far as the Gas Works, and then south-west. At the times of inspection, notwithstanding heavy rainfall, crude sewage was visible in the streams.

To the south of Long Buckby there is an open ditch carrying crude sewage which runs in a southerly direction; this ditch is covered for some distance on either side of the Broughton Road, but is open again a few yards south of the road.

The attention of the District Council was called to these conditions, and intimation made to them that these open sewers were a nuisance within the meaning of Sec. 91 (2) of the Public Health Act, 1875, and as they formed a stream which joined the River Nene at Weedon, Sec. 17 of the Act was also contravened. A complete scheme of sewerage and sewage disposal is an urgent necessity for this parish.

Kettering Urban. Inspections were made on 18th July and 2nd August of the stream into which the effluent from the Kettering Sewage Disposal Works is discharged. On both occasions there was evidence that the sewage was not efficiently treated, and that the stream into which the effluent discharged was grossly polluted. Before the second visit measures had been taken to cleanse the stream of its grossest impurities, but the liability to pollution was continuous.

The Urban Council's serious attention was at once called to these matters, and after consideration of a report of their representatives, following an interview with the Ministry of Health, it was decided to instruct Consulting Engineers to prepare, in detail, as soon as possible, a scheme for the construction of an entirely new Sewage Disposal Works.

Survey of River Avon. The Department co-operated with other local authorities in the annual survey of the Rivers Avon and Arrow, and pollution thereof.

On the 17th June and 15th October, officers of the participating authorities took samples

of water from various points through the length of these rivers for estimations of the dissolved oxygen content and the biological oxygen demand.

3. DRAINAGE AND SEWERAGE.

The following particulars as to sewerage and sewage disposal have been extracted from the reports received.

Kettering Urban. Consulting engineers have been instructed to prepare a scheme for a new Sewage Disposal Works and the laying of additional trunk sewers. By these means the needs of the added area of Barton Seagrave will be met.

Proposals have been submitted to the owners concerned as to the culverting of the East Brook, and the Council is giving close attention to the West Brook in order to minimise the risk of pollution from the sewage works.

Raunds Urban. A short length of 9-inch sewer was laid to serve the Council houses on the Crow Spinney Housing Site, and a new 9-inch sewer was laid in Butts Road and Midland Road. Improvements and alterations to the Stanwick works have resulted in a better effluent being obtained.

Wellingborough Urban. With the development of widespread housing estates within the area, the whole question of sewage disposal is being surveyed. Extensions of sewers have been made to new building estates.

The dredging operations and general attention given to the River Nene have made considerable improvement in the condition of the river.

Daventry Rural. During the year the Council had under consideration the provision of sewage schemes for the parishes of Braunston, Kilsby, Long Buckby, West Haddon, and Welton, and work of improvement at Byfield and Charwelton. The work relative to the above schemes is now in progress.

Kettering Rural. The sewage farm at Corby, although working at full capacity, has given no cause for complaint as to pollution of the South Brook. At Weldon complaints of pollution of the North Brook by oil from Corby were attended to: other work carried out during the year included the following:—Cottingham—Septic tanks and filters cleansed. Harrington—Septic tank and overflow ditch cleaned out. Thorpe Malsor, Warkton, and Weekley—Septic tanks and outfall ditches cleansed. Cranford, Grafton Underwood—Brook cleaned out. Little Oakley—Village dykes cleaned out and the open ditch covered in. Rushton—Septic tank cleansed.

Northampton Rural. The main addition to the sanitary services has been the laying of the new sewer along the Weedon Road to carry the sewage from the Berrywood Mental Hospital into the Borough system. This has allowed a number of the houses in Duston Parish, on the Weedon Road, to be connected up, and also makes provision for the sewers of Duston to be linked up via The Millway. When the latter extension is carried out—and I trust the Council will deem it advisable to do this as soon as possible—the whole of Duston will be efficiently sewered.

Oundle & Thrapston Rural. A new sewerage and sewage disposal scheme was completed in September at Woodford, at an approximate cost of £6,225; and also in Islip a sewerage scheme in respect of 32 dwellings on Kettering Road was completed in July at a cost of £900. The sewerage and sewage disposal works at Thrapston are unsatisfactory.

Towcester Rural. At Blisworth the condition of the Filter Beds has been most unsatisfactory, the beds being clogged and water-logged, and the walling to the filters defective. This resulted in a bad effluent.

Steps are being taken to remedy the defective filters, and a Consulting Engineer has been called in.

In Deanshanger and Old Stratford, where there was direct discharge of drainage into streams, schemes are in course of preparation to provide a proper sewage system for these parishes.

4. CLOSET ACCOMMODATION.

At the date this Report was completed, Annual Reports had been received from 6 Urban Districts and 5 Rural Districts. From these, it was ascertained that the number of privies (middens) and pail or earth closets converted to the water-carriage system during the year amounted to 130.

SECTION D.

Inspection and Supervision of Food.

1. MILK SUPPLY.

There were 165 producers of Grade A. Milk under licence from the County Council at the end of the year. Their premises have been inspected at regular intervals during the year, and the samples taken for bacteriological analysis showed a high degree of purity, except for a brief period in twenty-two instances.

The Accredited Producers Scheme is fully dealt with in Sec. B. of this Report, under the heading "Laboratory Facilities."

MILK AND DAIRIES (CONSOLIDATION) ACT, 1915.

Eight cases came under consideration during the year. The first case was in respect of a sample of milk taken in Wellingborough by the Inspector of Food and Drugs for the Northern Division from a supply from a Wilby farm, and found to contain tubercle bacilli. A veterinary inspection was made of the dairy cattle (25) on the farm—5 cows had been turned away and 3 cows admitted since the aforementioned sample was taken—and samples of milk were taken as follows :—(1) bulk sample from the whole of the herd, (2) from cow with mastitis in one quarter—sample taken from the other three quarters, (3) from cow in apparently poor condition, and (4) from cow with two atrophied quarters—sample taken from the other two quarters. Biological examinations were negative in each case.

The second, third, and fourth cases referred to samples of milk consigned to a wholesale depot in Buckingham by farmers at Abthorpe, Paulerspury, and Wappenham. Veterinary inspections were made of 15, 24, and 11 cows respectively, and 4, 7, and 4 group samples sent for examination. Tubercle bacilli were found in one of the samples from Abthorpe, in three samples from Paulerspury, and in two samples from Wappenham. Samples were then taken from each cow in the affected groups ; the examinations proved negative in the Abthorpe and Wappenham cases, but in the Paulerspury case five cows were deemed to be tuberculous as a result of the examinations and were destroyed under the Tuberculosis Order of 1925.

The fifth and sixth cases, notified by the Northampton County Borough Medical Officer of Health, related to samples of milk taken in his area from supplies from Hardingstone and East Haddon. The veterinary inspector examined 5 and 20 cows respectively, and took separate samples from the five cows and from 3 cows which were slightly suspicious. The results were negative in each case.

The seventh and eighth cases were reported by the London County Council Medical Officer of Health and were in connection with supplies sent to London from Blisworth and the Daventry district. Inspections were made of 15 and 24 cows respectively, and 4 group samples and samples from 4 separate cows were taken.

One of the latter proved positive and the cow was destroyed. One of the group samples was also positive, and as a result of examination of samples from each cow in this group, the affected animal was discovered and subsequently destroyed.

The Inspectors of Food and Drugs, under the provisions of Section 8 of the Act, took 31 samples of milk from supplies in course of delivery to consumers ; these were submitted for biological examination and were all pronounced free of tubercle bacilli.

MILK AND DAIRIES ORDER, 1926.

Under arrangements approved by the County Council in 1928, the Veterinary Inspectors, under the Diseases of Animals Acts, carried out half-yearly examinations of all dairy cattle in

their districts, except in certain areas where a quarterly inspection was in force. In consequence of the introduction of the Milk Marketing Board's Scheme, arrangements for a quarterly examination of dairy cattle were extended to cover the whole county. This allows the necessary quarterly certificates to be issued to producers who have obtained "Grade A." licences.

The reports of the Veterinary Inspectors show that generally the health and condition of the cows was satisfactory.

An improvement was noted in the attention paid to cowsheds, though in a few instances it was found necessary to give warnings as to insufficient flushing of floors, channels, etc. The Veterinary Inspector for the Kettering Joint District, in his report, states that "some years ago a card of instructions and advice for hanging up in the cowsheds was issued by the Joint Committee, which I think might be repeated with advantage. Excuses for the non-observance of definite elementary principles in regard to clean methods are many and various on the part of the comparatively few delinquents, but few have any foundation, seeing that the vast majority maintain a completely satisfactory standard."

In connection with the efforts to ensure a wholesome milk-supply, the following extracts from the reports of the Veterinary Inspectors for Kettering and Wellingborough Joint Dairies Districts are not without interest :—

Kettering Joint Dairies District.

"The practice carried out by the Sanitary Officials of submitting milk samples for examination for bacterial content has been continued on a somewhat larger scale, which, however, is still comparatively small in proportion to the amount consumed. For example, during 1935, seventy-two samples were taken in the Kettering Urban District, of which 70% attained Grade A. standard. This is so far satisfactory, but a much larger number of samples must be examined to avoid the risk of a false sense of security.

"Within the area of the Joint Committee there are upwards of 150 owners, with over 1800 cows, contributing to the public milk supply, so that there is ample room for an extension of the bacterial count-check, which, apart from other advantages, enables one to produce independent confirmatory evidence of unclean methods which is of great value in convincing an obdurate producer as to the error of his ways."

Wellingborough Joint Dairies District.

"The practice of taking milk samples by the Sanitary Inspectors, for laboratory testing as to cleanliness, has been maintained, and its effect is most satisfactory. This testing for cleanliness, aided by the recently-introduced Grade A. Licence Scheme, has been successful in drawing the attention of all milk producers to the importance of the cleanliness of the cows, which is open to improvement in many instances."

The Veterinary Inspectors took 176 samples of milk for examination for tubercle bacilli, six of which proved positive.

In addition, 841 samples were taken by the Sanitary Inspectors for examination for bacterial count at the County Laboratory ; these gave the following results :

" **Good** "—647 or 76.9%.

" **Moderate** "—148 or 17.6%.

" **Bad** "—46 or 5.5%.

The following table gives a list of inspections carried out during the year, and shows the number of cows destroyed on account of tuberculous infection :—

INSPECTION OF DAIRY COWS AND COWSHEDS.

	No. of Inspections and re-inspections of premises.	Number of Inspections of cows.	* Number of cows with Tuberculosis (including Tuberculosis of the Udder).	Number of cows with "scheduled diseases" under the Milk & Dairies (Consolidation) Act, 1915, or the Milk & Dairies Order of 1926.
PETTY SESSIONAL DIVISIONS.				
Brackley	444	6837	—	5
Daventry	696	7879	1	19
Little Bowden	188	3182	1	—
Northampton	860	10285	5	57
Oundle	492	4083	—	19
Thrapston	265	2374	—	11
Towcester	1080	8944	10	13
Kettering (Portion of Division not within the area of the Kettering District Joint Dairies Committee—up to 31st July, 1935).	8	108	—	—
DISTRICTS.				
Higham Ferrers Borough	28	257	—	—
Irthlingborough Urban	36	239	—	1
Kettering Joint.....	410	5242	19	61
Rushden Urban	62	608	—	4
Wellingborough Joint	348	4635	3	54

The figures for the Petty Sessional Divisions are for the 11 months ended 31st December, 1935 ; for the Districts the figures relate to the calendar year.

* *These cows were destroyed under the provisions of the Tuberculosis Order, 1925.*

2. MEAT AND OTHER FOODS.

Public Health (Preservatives in Food) Regulations, 1925-27.

463 of the samples submitted for analysis under the Food and Drugs (Adulteration) Act, 1928, were examined for the presence of a preservative. Five samples of fruit drinks and one of sultanas contained sulphite preservative within the prescribed limits.

3. ADULTERATION, etc.

FOOD AND DRUGS (ADULTERATION) ACT, 1928.

During the year, 546 samples were taken by the Inspectors of Food and Drugs for analysis by the County Analyst (Mr. E. W. Voelcker). Of these, 464 were formal and 82 were informal samples. Only 59 samples were reported on as being unsatisfactory, this number being an improvement on last year. The total list is as follows :—

Milk	360	Tea	1
Skimmed Milk	2	Cocoa	1
Cream	5	Chocolate Swiss Rolls ...	4
Butter	34	Chocolate Almonds	2
Margarine	8	Ground Almonds	6
Tinned Cream	10	Mincemeat	3

Condensed Skimmed Milk	27	Currants	1
„ Full Cream Milk	2	Raisins	1
Evaporated Milk	2	Sultanas	3
Cream Ices	2	Ground Ginger	2
Lard	4	„ Nutmeg	1
Pork Dripping	2	„ Cinnamon.....	2
Beef „	3	„ Cloves	1
Cooking Fat	1	„ Carraway	2
Chopped Beef Suet	1	Jams and Marmalade ...	6
Minced Beef	2	Table Jellies	3
Steak and Kidney	1	Tinned Fruit Salad	1
Pork Sausages	9	Tinned Peas	1
Beef „	1	Mint	1
Brawn	3	Malt Vinegar	1
Chicken, Ham & Tongue		Barley Lemon Water ...	2
Paste	1	Lemon Squash	2
Veal, Ham and Tongue		Orange Squash	1
Roll	1	Ginger Wine	1
Bovril	1	Whisky	3
Jardox	1	Gin	1
Self-Raising Flour	3	Rum	1
Sponge Mixture	1	Tincture of Iodine.....	1
Cake Flour	1	Olive Oil	1
Baking Powder	1	Boracic Powder	1
			<hr/>
			546
			<hr/>

75 per cent. of the total samples taken were of milks and creams, over 65 per cent. being of new milk.

Particulars of action taken in the cases reported against are dealt with in the Report on the work of the Inspectors of Food and Drugs :—

REPORT OF THE WORK OF THE INSPECTORS OF FOOD AND DRUGS.

Of the 360 samples of new milk, 50 were adversely reported on, 80 per cent. being deficient in fat, the remainder being slightly deficient in solids-not-fat, with the exception of one sample which was found to contain added water. In a fair proportion of these cases the milk was “Genuinely” poor and this was confirmed to some extent by “appeal to cow” samples. Failing to mix the milk of the herd and neglecting to milk the cows fully are other causes likely to affect the composition of the milk.

Three samples taken from a vendor were respectively 59.6, 6.3, and 7.6 per cent. deficient in fat, and as an “appeal to cow” sample was satisfactory, proceedings were instituted. No actual abstraction was proved, but there was evidence of negligent milking in the absence of the defendant ; the cases were dismissed on payment of 4s. 6d. costs in each instance. The seller of the sample containing 20.2% of added water and which was 36.7% deficient in fat, was prosecuted and fined £2. Of the samples other than milk, one of ground cloves and one of ground cinnamon contained excessive sand. As the shopkeeper had recently purchased the business together with the stock, no proceedings were taken.

Two samples purporting to be Chocolate Swiss Roll were purchased for analysis. One labelled “Choclait” contained 1 per cent. of cocoa material, and the second sample, labelled “chocolate” contained even less cocoa—0.10 per cent.—and had neither the taste nor smell of chocolate, but was dyed to give it a chocolate colour. As the shopkeeper relied on the warranty, it was agreed to take a further sample in the course of delivery, and, as the analytical result was similar, proceedings were taken against the manufacturers for (1) giving a label which falsely described the article sold, and (2) giving to the purchaser a false warranty.

The case attracted considerable notice throughout the confectionery and grocery trades, witnesses being brought from a considerable distance to testify for the defence the impossibility of successfully manufacturing a chocolate swiss roll with the amount of cocoa—a minimum of 4 per cent. fat free cocoa material—suggested by the prosecution.

As there is no statutory standard of the amount of cocoa to be used in making chocolate swiss rolls, the justices had to decide the case on the evidence, and fines of £2 10s. 0d. in each case were inflicted, with the addition of £10 towards the costs.

One satisfactory feature of this case is that as a result of the proceedings, the confectionery trade has been advised to increase the percentage of cocoa in chocolate swiss rolls, and it is of interest to note that a later sample taken in this County contained 4.2 per cent. of dry fat free cocoa material.

The percentage of samples reported against during the years 1931-1935 is shown in the following table :

Year.	*Samples submitted for analysis.	Cases reported against.		Amount of fines and costs in prosecutions.		
		Number	Percentage.			
1931	409	58	14.1	£18	5	0
1932	434	48	11.0	£16	1	0
1933	532	50	9.4	£10	0	0
1934	538	72	13.1	£5	17	0
1935	531	57	10.0	£16	18	6

* *Excluding "Appeal to cow" samples.*

Public Health (Condensed Milk) Regulations, 1923-1927.

Thirty-one samples were taken for analysis ; of these, two samples were slightly deficient in non-fatty solids.

Public Health (Dried Milk) Regulations, 1923-27.

No action was taken.

Artificial Cream Act, 1929.

No action was taken.

Milk (Special Designations) Order, 1923.

Eight samples of Grade A. milk were submitted for analysis during the early part of the year, and all complied with the prescribed conditions.

Two new licences to produce Grade A. (Tuberculin Tested) milk were granted by the Ministry of Health, and one licence was cancelled.

At the end of the year 1935, the licences held by producers in this County were as follows :—
Certified 3, Grade A. (Tuberculin Tested) 6 ; Grade A. 165.

SECTION E.

Prevalence of, and Control over, Infectious and other Diseases.

1. ISOLATION HOSPITAL ACCOMMODATION.

Negotiations with regard to hospital accommodation for Infectious Diseases are still in progress, so I am not yet able to review the subject in its proper perspective. The County Council have now prepared a scheme under the provisions of Section 63 of the Local Government Act, 1929 ; this scheme has been submitted to the Ministry of Health.

Meanwhile the Isolation Hospitals at Kettering, Oundle, Staverton and Wellingborough are all open for the reception of patients, and many districts which have provided no accommodation themselves are able by arrangement to admit cases to one or other of these four hospitals.

2. INFECTIOUS DISEASES AND VACCINATION.

Smallpox. No case of smallpox was notified in the County during the year 1935.

In connection with the prevention of this disease, however, information was received from the Port of London Sanitary Authority to the effect that two persons who had travelled in a steamship which had a case of Smallpox on board, were proceeding to this County. The District Medical Officer was promptly notified and all precautions taken.

In addition, three suspicious cases were seen in different parts of the County at the request of either medical practitioner or district medical officer of health ; in two instances the disease was eventually diagnosed as chicken-pox and in the third case as urticaria.

Vaccination. The statistics of Vaccination for the year 1934 (the latest year available) show a slight increase in the number of successful vaccinations in the Administrative County, the percentage of successful vaccinations to registered births being 9.9 as compared with 9.3 for the year 1933. The highest percentages of vaccinations were in the districts of Brackley (24.1), Oundle (23.9), and the lowest in the districts of Wellingborough (3.7), Northampton Rural (5.1), and Kettering (5.5.).

Scarlet Fever. 628 cases of Scarlet Fever were notified during the year 1935, showing an increase of 86 cases as compared with the year 1934. Cases occurred in each week of the year, 34 per cent. being notified during the last quarter. Crick and Daventry Rural (143), Wellingborough Urban (94), Northampton Rural (84), Wellingborough Rural (42), Kettering Urban (39) had the highest number of notifications.

There were three deaths, representing a case mortality of 0.47 per cent. as against 0.55 per cent. in the year 1934.

One school was closed on account of Scarlet Fever.

Diphtheria. The notifications of Diphtheria (124) were less by one than in the year 1934. Except for seven isolated weeks, cases occurred each week during the year, the last quarter being responsible for 33 per cent. Northampton Rural (17), Daventry Rural (16), Brixworth Rural (14) had the greatest number of cases. There were 16 deaths, giving a case mortality of 12.9 per cent. as against 7.2 per cent. in the year 1934.

Enteric Fever. Twenty-one cases (including six paratyphoid) of Enteric Fever were notified against two cases in the year 1934. The cases in 1935 were distributed among 14 Districts. As in 1934, there was one death.

Erysipelas. Eighty-seven cases were notified, as against 131 in the year 1934.

Measles. Information was received of cases of Measles at Kilsby and Easton-on-the-Hill—where the schools were closed—and at Oundle. No deaths occurred, as against 23 in the year 1934.

Whooping Cough. Ten deaths occurred, as against four in the year 1934.

Chicken Pox. Information of the occurrence of 50 cases of Chicken Pox was received by the County Health Department : Hardingstone Rural 22, Towcester Rural 13, Potterspury Rural 12, Northampton Rural 3. Thorpe Malsor school was closed on account of an outbreak of the disease.

Diarrhoea and Enteritis, (under 2 years of age). Six deaths occurred as against four in the year 1934.

Puerperal Pyrexia : Puerperal Fever ; Ophthalmia Neonatorum. These diseases are dealt with under “ Maternity and Child Welfare ” in Section B. of this Report.

Influenza. Forty-eight deaths occurred as against 27 in the year 1934. Stoke Albany school was closed on account of an outbreak of this disease.

Pneumonia (Acute Primary and Acute Influenzal). 201 cases were notified as against 270 in the year 1934. 110 were in the Urban Districts and 91 in the Rural Districts. With the exception of four weeks, cases occurred in each week of the year, the first four months being responsible for over 50 per cent.

The deaths from *all forms* of Pneumonia amounted to 130, as against 139 in the year 1934. Of the deaths during 1935, 72 occurred in the Rural Districts and 58 in the Urban Districts.

Acute Poliomyelitis. Eight cases were notified and there were three deaths, as against no notified case and one death in the year 1934.

Cerebro-Spinal Fever. Three cases were notified, with two deaths, as against five cases and two deaths in the year 1934.

Encephalitis Lethargica. There were no notified cases and three deaths, as against two cases and eleven deaths in the year 1934.

Acute Polio-Encephalitis. One case was notified and there was no death, as against one case and one death in the year 1934.

Malaria. One case (contracted abroad) was notified, as against two cases in 1934.

(Remarks as to School Closures do not apply to schools in the Kettering Urban District which is its own Elementary Education Authority.)

Home Nursing of Infectious Cases. In addition to cases of Puerperal Fever, Puerperal Pyrexia and Ophthalmia Neonatorum, the following cases were nursed in their homes, under the arrangements of the County Council :—Influenza 214, Pneumonia 99, Infantile Diarrhoea 25, Measles 21, Whooping Cough 7, Chicken Pox 3 and Erysipelas 1.

3. TUBERCULOSIS.

The following figures, compiled from the Returns of the District Medical Officers of Health show the position of the County as regards existing cases of Tuberculosis at the end of the year 1935,

Pulmonary.			Non-Pulmonary.			Total.
Males.	Females.	Total.	Males.	Females.	Total.	Cases.
469	464	933	147	129	276	1,209

Particulars of new cases of Tuberculosis and of all deaths from the disease in the area during 1935 are shown below.

AGE PERIODS.				NEW CASES.				DEATHS.			
				PULMONARY.		NON-PULMONARY.		PULMONARY.		NON-PULMONARY.	
				M.	F.	M.	F.	M.	F.	M.	F.
0	...	...	...	—	—	2	—	—	—	1	1
1	...	...	...	—	—	1	5	—	—	1	4
5	...	...	...	—	2	1	3	—	—	2	3
10	...	...	...	—	—	2	5	—	—	—	—
15	...	...	...	4	14	1	3	13	16	2	3
20	...	...	...	12	26	—	3	—	—	—	—
25	...	...	...	25	25	6	3	24	19	2	—
35	...	...	...	22	11	1	2	7	9	1	1
45	...	...	...	10	12	—	3	12	3	—	2
55	...	...	...	4	4	1	—	8	3	2	—
65 and upwards	...	...	...	3	2	—	—	3	2	2	—
TOTALS				80	96	15	27	67	52	13	14

Thirty (or 20.5 per cent.) of the total deaths from Tuberculosis were not notified in this Administrative County ; in respect of eight of these the information was obtained either from the local Registrars' returns or from the slips received quarterly from the Registrar-General relating to deaths of residents occurring outside the County ; and twenty-one were transfers from other areas ; there was also one posthumous notification. The non-notifications were enquired into, and the explanations furnished were, (1) that the medical attendants believed the cases had been previously notified, (2) diagnosis not made ; (3) patient only in district one week before she died. There does not appear to have been wilful evasion of notification of the disease in this county.

The total primary notifications of Tuberculosis during the year 1935 amounted to 188, 100 in the Urban Districts and 88 in the Rural Districts. Of this number, 150 were suffering from respiratory forms of the disease and 38 from other forms of Tuberculosis. There were 18 fewer primary notifications during 1935 than for the year 1934. Table III. in the Statistical Section shows the number of cases notified in each District.

There was no evidence of excessive incidence of tuberculosis in any particular occupation in the County.

Persons engaged in the Boot and Shoe Industry accounted for 15 per cent. of the notifications ; this is not an unduly high figure seeing that this is the principal industry in the County.

Mortality. Respiratory—During the year 1935, 119 deaths (67 males and 52 females) occurred, 62 of which were in the Urban Districts and 57 in the Rural Districts.

Other Forms—Twenty-seven deaths occurred from other forms of the disease (13 males and 14 females)—19 in the Urban Districts and 8 in the Rural Districts.

There were thus 146 deaths from all forms of Tuberculosis as compared with 148 deaths in

1934. The mortality rate was 0.67 per 1,000 of the population as against 0.68 in the previous year. The rate for the Combined Urban Districts was 0.76 and for the Combined Rural Districts 0.58.

Public Health (Prevention of Tuberculosis) Regulations, 1925.—These Regulations, which ordinarily apply to the Councils of urban and rural districts, provide means to prevent persons suffering from pulmonary tuberculosis from being employed in occupations in connection with dairies, which would involve the milking of cows, the treatment of milk, or the handling of vessels used for containing milk. The County Council applied for, and obtained an Order from the Ministry of Health in June, 1926, constituting the Council an Authority (concurrently with the Urban and Rural District Councils) under the Regulations. No action by the County Council was found necessary during the year under these regulations, and no information was received from any local authority in the County as to action having been taken by them.

Public Health Act, 1925. Section 62.—No action was taken by this County Council under the powers given to County Councils and local Sanitary Authorities for the compulsory removal to a hospital or institution of persons suffering from pulmonary tuberculosis of an infectious character, who are a serious risk to others, or whose lodging or accommodation is such that proper precautions to prevent the spread of infection cannot be taken, or in whose case such precautions are not being taken.

Dispensary Work. The situation, days and hours of opening of the three County Tuberculosis Dispensaries are as follows :—

- | | |
|---------------------|---|
| (1) Northampton. | 18, Guildhall Road, Northampton.
Saturdays, 9.30 a.m. to 12 noon. |
| (2) Kettering. | Market Street, Kettering.
Fridays, 10 a.m. to 12.30 p.m. |
| (3) Wellingborough. | 108, Midland Road, Wellingborough.
Wednesdays, 10 a.m. to 12.30 p.m., and 2 to 3.30 p.m. |
| Ditto. | Ultra Violet Light Clinic, 108, Midland Road, Wellingborough.
Mondays, 9.30 a.m. to 2 p.m. |

During the year, 1,310 patients visited the dispensaries and made a total of 2,795 attendances, or an average of 2.13 visits per patient. This number includes 1,088 attendances made by 43 patients who came for treatment by Ultra Violet Radiation at Wellingborough Dispensary.

479 new patients, exclusive of contacts, presented themselves for examination at the dispensaries for the first time in 1935. Of these, 158 were diagnosed as suffering from tuberculosis before the end of the year, 5 were considered to be doubtfully tuberculous and remained under observation, and 316 were considered to be non-tuberculous.

139 contacts were examined in addition to the 479 new patients. Of these, 1 was regarded as suffering from tuberculosis, and 138 were considered to be non-tuberculous.

Apart from tuberculosis the following diagnoses were made in connection with these 618 cases :—

Tonsillitis and chronic nasopharyngeal infections	Arterio-sclerosis
Chronic bronchitis and emphysema	Diabetes mellitus
Bronchiectasis	Chronic appendicitis
Pneumonia and empyema	Graves' disease
Cancer of lung	Simple arthritis
Mitral disease	Primary scoliosis
Aneurysm	

The number of visits made by the Tuberculosis Officer to patients in their own homes was 629 (inclusive of 91 personal consultations with medical practitioners). The total number of

consultations, personal and otherwise, between Tuberculosis Officer and medical practitioner during the year was 587. This figure illustrates the co-operation which exists between general practitioners and the Tuberculosis Officer.

To emphasise this fact still more it is very interesting to note that of the 159 new patients who were diagnosed as suffering from tuberculosis, 72 per cent. were notified after they had been examined by the Tuberculosis Officer and only 28 per cent. previous to examination by the Tuberculosis Officer. All these patients, with the exception of one who was examined as a contact, were seen by the Tuberculosis Officer at the request of their own medical attendant.

During the year, the total number of visits paid by the Tuberculosis Nurse and Health Visitors to the homes of tuberculous patients was 2,663.

Table A. in the Statistical Section shows in detail the work of the Dispensaries.

Of the 618 persons, including contacts, who presented themselves for examination for the first time in 1935, 130 were found to be suffering from pulmonary tuberculosis, and 29 from non-pulmonary tuberculosis. The former were placed in the following categories :—

Sputum negative for Tubercle Bacilli	60 or 46.16 per cent.
„ positive „ „ „ Group 1	3 or 2.30 „
„ „ „ „ „ „ 2	50 or 38.46 „
„ „ „ „ „ „ 3	17 or 13.08 „

The 29 non-pulmonary cases were classified as follows :—

Bones and joints	16 or 55.17 per cent.
Abdominal	7 or 24.14 „
Peripheral Glands	6 or 20.69 „

In 1935, 130 cases of pulmonary tuberculosis were diagnosed as compared with 139 cases in 1934. 29 cases of non-pulmonary tuberculosis were diagnosed in 1935 as compared with 23 such cases in 1934.

Tables B (1) and (2) in the Statistical Section show in summary form the condition of all patients whose case records were in the possession of the dispensaries at the end of 1935, arranged according to the years in which the patients first came under Public Medical Treatment for tuberculosis.

During the year, 49 pulmonary and 33 non-pulmonary cases were transferred from the arrested to the cured class and written off the Register as “ Recovered.”

Pathological Specimens. During the year, 453 specimens of sputum were examined for tubercle bacilli by the Tuberculosis Officer; of these, 94 were positive. The Tuberculosis Officer is often curious as to the clinical condition in cases with purulent negative sputa to which he has not been introduced. On the whole, it is considered that practitioners rely too much upon a negative sputum report in discarding a diagnosis of pulmonary tuberculosis.

X-ray Work. The value of X-ray work in contributing towards accuracy of diagnosis was again much appreciated. This is particularly evident in regard to chest diseases. Clinical signs, history and sputum examinations are often insufficient to differentiate between cancer of lung, bronchiectasis and pulmonary tuberculosis. The information which X-rays give often determines the diagnosis. With modern equipment X-rays pick out the early infiltration of pulmonary tuberculosis before there are clinical signs, and treatment can be immediately started with advantage. It was decided to enlarge the X-ray Department and to remove the apparatus at present at the Wellingborough Dispensary to the Rushden House Sanatorium, and to instal a new equipment at the Dispensary. The inspection of new apparatus and a final choice of the new equipment was made by the Tuberculosis Officer during the year.

During the year, 729 X-ray examinations were made at Wellingborough Dispensary of patients with heart and pulmonary disease, and with bone and joint disease.

X-ray control was constantly practised in the treatment of patients by artificial pneumothorax.

Extra Nourishment. Extra Nourishment mainly in the form of milk was supplied during the financial year 1935-1936 on the recommendation of the Tuberculosis Officer to 62 patients suffering from tuberculosis, as against 54 such patients in the year 1934-1935.

Drugs and Medical Appliances. During the year 1935, 112 One-lb. jars of Roboleine were given by the Tuberculosis Officer to patients (chiefly children) receiving dispensary treatment.

Shelters. The number of open-air shelters occupied by tuberculous patients during the year was 21. All these are the property of the County Council. The shelters are made in sections and bolted together, but their periodic taking down, removal and reassembling for the use of patients makes renewals necessary from time to time. Removals and re-erections were carried out on nine occasions during the year 1935. No new shelters were purchased during 1935.

Tables C (1), (2) and (3) in the Statistical Section show the number of beds available in institutions and the extent of residential treatment provided during the year 1935.

During the year, 175 Northamptonshire County Council patients were under treatment at Rushden House Sanatorium.

No. of patients in Rushden House Sanatorium on 1st Jan., 1935 ...	73
„ „ admitted during the year	102
„ „ discharged during the year	87
„ „ who died in the Sanatorium	18
„ „ in the Sanatorium on 31st December, 1935	70

Two patients died in Cambridge Tuberculosis Colony, Papworth, during the year. One patient was admitted on October 25th, 1935, this being the only case under treatment at the end of the year.

A girl, aged 2, was admitted for convalescent treatment to the Holy Cross Convent, Broadstairs, in August, and a boy of 14 was admitted to Burrow Hill Sanatorium, Frimley, Surrey, in November. Both patients remained under treatment at the end of the year.

One ex-serviceman was discharged from the British Legion Village, Preston Hall, and one admitted, during the year. The latter case was still under treatment at the end of the year.

Table D. in the Statistical Section shows the immediate results of treatment of patients discharged from institutions during the year 1935.

Non-Pulmonary Tuberculosis.

The total number of non-pulmonary patients who received institutional treatment during 1935 was 54. The institutions where treatment was afforded were as follows :

Manfield Orthopædic Hospital, Northampton.....	30 patients.
Wingfield Orthopædic Hospital, Oxford	1 „
Creton Sanatorium, Northampton	8 „
Rushden House Sanatorium	
(Gland and Abdominal cases)	15 „

No. of patients in institutions on January 1st, 1935	28
„ „ admitted during the year	26
„ „ discharged during the year	21
„ „ who died in institutions	5
„ „ in institutions on December 31st, 1935	28

(The above figures include the gland and abdominal cases at Rushden House Sanatorium.)

Treatment.

I am indebted to Dr. G. B. Lord, the Clinical Tuberculosis Officer, for the following report on treatment :—

In addition to routine Sanatorium and domiciliary treatment, additional measures have been adopted.

The following methods of treatment have all been applied during the year at the patients' homes, at Dispensaries or at the Sanatorium :—

1. TUBERCULIN. Tuberculin has been given to patients with genito-urinary tuberculosis. It has value in lessening dysuria. One patient has received tuberculin from the Dispensary for five years with encouraging results.

2. CRISALBINE. This is a gold salt. Its therapeutic action is similar to sanocrysin, but it is less toxic. It has been used for patients with lupus erythematosus and the results have been excellent. It has also been given for pulmonary tuberculosis cases, and the results are chiefly found in curtailing and abolishing tubercle bacilli in sputum and in assisting fibrosis. Intravenous injections of Crisalbine have been given as follows during the year by the Tuberculosis Officer :—

At Dispensaries.....	83
At Sanatorium	22
	<hr/>
	105

3. ULTRA VIOLET RADIATION by means of a mercury vapour for general, and a Kromayer lamp for local treatment, has been used for broken-down tuberculous glands and sinuses, and for lupus. A report on this treatment is given later.

4. COLLAPSE THERAPY. The operations of pneumolysis and artificial pneumothorax have been used during the year.

a. Pneumolysis A patient in whom artificial pneumothorax had failed was sent to a London Hospital for an anterior wax insertion. The result was not satisfactory.

b. Artificial Pneumothorax. 329 pneumothorax inductions and refills were given during 1935 by the Tuberculosis Officer. These operations were carried out as follows :—

At Patients' Homes	28
At Sanatorium	113
At Dispensaries.....	185
At Northampton General Hospital	3
	<hr/>
	329

Twenty patients were treated. All these originally had a positive sputum. At the end of the year, 18 of these had no sputum or no tubercle bacilli in sputum. One patient completed treatment by pneumothorax with satisfactory results during the year.

As regards working capacity, at the end of the year, 10 were fit for full-time work. One patient died, with hip disease as a complication.

Preventive Measures and Treatment.

All measures for prevention and treatment are still seriously handicapped by the difficulty of getting control over all cases of tuberculosis, and of initiating treatment in the vital cases of patients who have recently developed disease. The Public Health Authority is required to expend considerable sums of money in treating tuberculosis, and yet the Tuberculosis Officer is not at liberty to take really active steps in seeking out the chronic tuberculosis "carrier," and the latent or early cases of tuberculosis amongst the general public. It should be realised that much expense is involved by the presence amongst the general public of the chronic carrier. This carrier may be well fibrosed, but he discharges tubercle bacilli intermittently, and gives rise to

successive new cases of active disease amongst his associates in workshop and factory. Many of these carriers have never been seen by doctors ; they are not notified, and are not aware of their own menacing condition ; they have been able to keep relatively fit by virtue of their own resistance. Such carriers working in contact with young adults cause an incidence of active pulmonary tuberculosis. It may be asked why do we suspect the presence of such carriers ? When new patients come for diagnosis, and infectious pulmonary tuberculosis is found, an endeavour is made to discover the source of infection. In occasional instances no immediate source of infection is discovered. The family history is good and examination of home contacts is negative. On enquiry, the patient is not known to have been associated with any case of tuberculosis known to the Tuberculosis Officer, or on the Tuberculosis Dispensary Register. It is in such circumstances as these that an unknown and unnotified carrier is suspected—the contact occurring at work.

The supply of tuberculosis infection in offices and factories, therefore, is provided by these tuberculosis carriers who have never been acutely ill, and who have been under no medical supervision. An additional source of infection comes from a few patients known to doctors, and to the Tuberculosis Officer, who have had treatment under the Dispensary scheme, have been fit enough to return to work, and have then relapsed without reporting to Tuberculosis Officer or to General Practitioner. The apathy and ignorance of patients, the determination to carry on at work and the fear of economic disaster which may follow notification as a case of tuberculosis, all contribute to this state of affairs. The waste in health, and in money on expenditure of treatment, is very serious. A young adult derived from good stock with no record of family tuberculosis may receive infection from a hidden case of tuberculosis in factory, workshop or office. He delays coming under treatment. He has active disease and discharges tubercle bacilli. At his house the disease is introduced and may permeate through generations. This tragic vicious circle has been common in the past and is still not checked. What are the remedies ?

Education must play its part not only in promulgating general health ideals, but in teaching that tuberculosis is not necessarily a fatal disease, that cure is possible and has been achieved, and that anybody complaining of unexplained cough, lassitude or loss of weight lasting more than four weeks should see a Doctor. An efficient tuberculosis scheme which will lift the patient and his family out of the fear of economic disaster, and, by promising him security during the period of his incapacity from tuberculosis, will tempt him to come forward to the Doctor in the early and treatable stage of his disease, is another essential factor.

Other remedies lie in the hands of general practitioners and Tuberculosis Officer. The general practitioner should be quick to suspect tuberculosis. The Tuberculosis Officer is reliant on practitioners for the provision of his cases and all practitioners should be anxious to send forward to the Tuberculosis Officer all cases of unexplained primary indisposition, however irrelevant to tuberculosis their condition and symptoms may casually appear to be. The practitioners should not rely too much on a negative sputum report in discarding a diagnosis of tuberculosis. The false security of a negative report on a patient's sputum is a cause of disaster, when no additional investigation, such as X-ray, is undertaken.

The Tuberculosis Officer should endeavour constantly to keep himself in touch and even in sight of the practitioner by sending repeated and careful reports about his patients, by encouraging the practitioner to send all types of cases to the Clinics for diagnosis and by prompt attention to personal consultations.

If these principles were followed, and most particularly if we could persuade patients, and make it worth their while to come forward, we should seldom meet the patient, seen for the first time, who has advanced disease, who has struggled on at work or who has been treated for chronic bronchitis.

We should make our diagnoses earlier in time, but, even then, we should not have disclosed the tuberculosis "carrier" who has never seen a Doctor. There is only one measure which will discover the chronic case of pulmonary tuberculosis who has never been under treatment and is unaware of his condition. This measure is the wholesale and compulsory examination of the adult general public, at intervals.

The nearest approach we have at present to a serious examination of a large block of the general public is contact examination. Contact examination is limited in its success for two main reasons :

1. It is difficult to persuade the most vital of all contacts—young adults—to submit to examination.
2. The expense required for the first and very frequently repeated subsequent examinations of all contacts over a large number of years is very considerable. Expense, however, should not be a determining factor. Tuberculosis is the most expensive and wasteful disease known to mankind because it claims its victims chiefly in youth and early manhood and womanhood, *i.e.*, when economic working capacity is at its greatest. We may comment, at this point, that very large sums of money are annually subscribed for cancer research, a disease which destroys men and women after their most useful working days are over. There is no such large and comparable subscription for tuberculosis.

Is a wholesale examination of the general public useful and practicable? It has been suggested before for the detection of both cancer and tuberculosis, and has not been generally adopted because any examination conducted within the recognised limitations of a practitioner's consulting room may miss the presence of early tuberculosis or early cancer.

In respect of tuberculosis, we may ask whether there is any one method of examination which is easily applied and which will decide, with only a small margin of error, that pulmonary tuberculosis is not present? We consider that there is such an examination available.

We dismiss routine physical examination because it consumes a great deal of time and because it may not reveal active pulmonary tuberculosis when it is present. In this connection, sputum examinations are also discounted; a positive sputum examination is conclusive, but we cannot say that pulmonary tuberculosis is not present because of a negative sputum report, or because there is no sputum.

Turning to X-rays, we submit that it is possible on the X-ray fluorescent screen, with the eyes fully accommodated, to decide whether a subject's heart and lungs are normal or whether they present signs of morbid changes. The margin of error is small. The expense of this examination is not heavy, and the time spent on each subject would be one minute.

It is necessary to emphasise that pulmonary tuberculosis cannot be diagnosed by means of the X-ray screen alone. Once the appearances of the normal chest on the X-ray screen, at different ages, are familiar, the radiologist is able to say whether he sees the normal or the abnormal with very small degree of error. Those subjects whose screen examination gives normal results may be dismissed with confidence, those in whom an abnormality is seen are retained for full clinical, bacteriological and X-ray examination in order to establish a diagnosis.

It is considered that if this method were practised on a large section of the public, many cases of latent and early pulmonary tuberculosis, who had not started treatment, could be diagnosed and dealt with, and the chronic tuberculosis carrier also would be disclosed.

The Classification and Care of "Delicate" Children.

Sixteen "delicate" children received Ultra Violet Ray treatment. It is useful to make a general classification of "delicate" children.

Any General Practitioner, School Medical Officer or Tuberculosis Officer who has considered the problem of delicate children will be likely to place these children, after consideration, into three categories with respect to diagnosis, treatment and remedial measures.

1. **NEGLECTED CHILDREN.** That is to say—children who are ill-kept, dirty, badly nourished and rickety, undergrown, bronchitic, peevish and ill-behaved, constipated and with foul tongue and teeth, glands in the neck and nits.

Rigorous attention to home conditions, and education of parents will remedy these evils ; this must be accomplished by better housing conditions and by the continuous and active work of Health Visitors, aided at times by officers of the N.S.P.C.C. Supplementary treatment by dentists and by Ultra Violet Light Clinics will be useful at out-patient or Dispensary stations. But any Institutional treatment, without attention to home circumstances, is useless and wasteful for these children.

2. TEMPORARILY DISABLED CHILDREN. These children are suffering from a temporary but definite illness, or result of illness, and the prognosis is good. Such children may be convalescent from any of the fevers, from any abdominal operation, from tonsils and adenoids, from pneumonia or broncho-pneumonia.

The proper course of action is to secure a period of in-patient treatment at a Convalescent Home at the seaside.

3. SICK CHILDREN. Children suffering and likely to continue to suffer from one definite disease, *e.g.*, bronchiectasis, rheumatism and heart disease, orthopædic conditions and tuberculosis.

Treatment for such children should be applied in General Hospitals, in Sanatoria or in Orthopædic Hospitals.

Pulmonary Tuberculosis in Children, and Sanatorium Treatment.

Pulmonary tuberculosis in children from infancy to 14 is a rare disease. X-rays have proved conclusively that children at one time diagnosed as suffering from pulmonary tuberculosis were suffering from catarrhal infections only or from bronchiectasis. Many children coming to Clinics with abundant crepitations in their chest presented no abnormal X-ray findings whatever on the first or on many subsequent visits. X-rays have also proved that hilus tuberculosis does not exist. Enlarged hilus shadows are temporary and due to measles, and secondary to nasopharyngeal infections. If pulmonary tuberculosis is present in a child, tubercle bacilli can be found in sputum or in faeces or in stomach contents.

It has been demonstrated conclusively, by investigation with controls that the ultimately tuberculous children do not arise *disproportionately* from amongst those who have suffered from the fevers, from those who have insufficient and dirty clothes and dirty bodies, from those who have deficient nutrition, anaemia, bronchial catarrh, and rickets, or from those who are underweight. Of delicate children in Lancashire referred to the Tuberculosis Officer because tuberculosis was suspected, 59% were rejected as non-tuberculous, and of these only 0.91% returned later as definite cases of tuberculosis in young adultage. In these rejected cases, some condition other than tuberculosis is present, which requires appropriate remedy.

Pulmonary tuberculosis in children is often found in very well-developed subjects who are overweight and have never had a previous illness or any seediness or malnutrition. Referring to the paragraph on "the classification and care of delicate children," it is obvious that none of the children in groups 1 or 2 should be treated in a Sanatorium.

The guidance of the Lancashire Tuberculosis Authorities on this matter is well worth following as they have studied the question very closely for years.

Dr. Lissant Cox, in Lancashire, provides one Sanatorium bed (for pulmonary tuberculosis) for every 7,560 of the child population (aged 0—15).

It is very well worth while basing our estimate for the requisite number of beds for pulmonary tuberculosis in children in this County upon the Lancashire assessment.

The child population in Northants from 0—15 years at 1931 census was 48,234.

If, therefore, we provide approximately 6 beds, we have one bed for every 8,040 children, and if we provide 7 beds we have one bed for every 6,900 children.

The death rate from tuberculosis is less here than in Lancashire and 6 beds at the Sanatorium

(3 boys, 3 girls) for children seems to be a very safe assessment, provided diagnosis continues to be accurate.

Treatment of Tuberculosis by Artificial Light.

During the year ended 31st December, 1935, 43 patients attended the Wellingborough Dispensary for treatment by Ultra Violet Radiation. The total number of attendances made by these patients was 1,088.

The conditions for which treatment was given are classified as follows :

Lupus	10
Cervical adenitis	14
Tuberculous osteitis	1
Tuberculous abdomen	2
Delicate	16
	—
	43

LUPUS.

Ten patients received treatment for lupus during the year. Most of these showed definite improvement with the exception of one case, which is still proving very resistant, and with the exception of another patient who was too old to attend regularly. The patient with the lupus erythematosus had light treatment, local and general, assisted by intravenous gold in the form of Crisalbine. The results have been very good, the patches of lupus have retreated and become whitened, and irritation has ceased. This patient has had no reactions whatever due to gold injections.

CERVICAL ADENITIS.

Fourteen patients received treatment for glands in the neck during the year, and the results have been very good in each case. Some of these patients had merely infiltrations in the neck without breaking down of the glands, and these all resolved. One infiltration seemed to be almost calcified in character, but by local and general light treatment resolution was effected. All patients with sinuses from glands progressed favourably, and the sinuses closed during the year. No patient was referred for operative treatment.

TUBERCULOUS OSTEITIS.

One man with an ankylosed shoulder joint received light treatment. The results are satisfactory in respect of absence of sinuses, and improvement in general condition.

TUBERCULOUS ABDOMEN.

One patient continued treatment for tuberculosis of the abdomen until he removed from the district.

Another patient was a suspect case of tuberculous mesenteric glands. He received radiation during the period he was under observation, and was finally discharged as non-tuberculous.

DELICATE.

Sixteen children were received for treatment during the course of the year. They all showed improvement in weight gain, and more satisfactory vitality.

The results of treatment seem to suggest that the most valuable results are gained with tuberculous glands and sinuses. Light treatment appears to be the most efficient and quickest measure of dealing with these glands.

It is a valuable character of the treatment that work is not interfered with while this treat-

ment is being given. The patients attend at out-patient centres, and in-patient treatment is not necessary.

For lupus cases, local and general Ultra Violet Radiation, together with gold, can prove of marked value.

After Care.

I have again to express appreciation of the good work carried on by several Area Committees. Much practical help and advice has been given in the urban districts, and grants of milk, butter, eggs, clothing and Christmas parcels have been made. Patients are visited regularly in several of the areas by After-Care visitors, and in addition in all areas by the County Health Visitors. Members of Area Committees have assisted in improving housing conditions for patients and families, and District Medical Officers of Health have also co-operated in this connection.

During the year much careful consideration in this Department was given to the After-Care service. It was found that the work in Urban Districts was proceeding favourably, but that there was a lack of continuity in the work in Rural Districts.

VOLUNTARY ORGANISATIONS.

It was considered that there was need for extension of the services in rural areas, and that the consideration of the application of certain benefits from the Public Health Authority as a form of domestic treatment would do much to equalise the Dispensary scheme in the rural districts with that of the urban districts.

A large amount of work is achieved in the After-Care treatment of patients by voluntary and charitable organisations in the County. These Committees work in co-operation with the Public Health Department, and advice on administrative matters and also on questions relating to individual patients is freely given by the Tuberculosis Officer. It is found, therefore, that patients in Urban districts are able to rely upon the County Council grant, administered at the discretion of the Tuberculosis Officer, and also upon an amount of charitable relief and advice from these local Urban Committees.

PATIENTS IN RURAL AREAS.

Patients in Rural districts receive assistance upon recommendation of the Tuberculosis Officer, from the County Council grant. But neither these patients nor their families are helped by any charitable organisations. The reasons for the failure of such treatment in Rural areas are apparent. The scattered nature of the tuberculosis population in outlying villages—often only one patient may occur in a group of two or three villages—renders the machinery of a decentralised voluntary Committee treating an isolated patient unsatisfactory, and the creation of a charitable organisation to succour one or two patients who may die, recover or remove at any moment, is found to be an uncertain proposition. The amount, therefore, of local tuberculosis population in any scattered rural area is so unstable and transient, that a permanent local administration becomes impracticable.

And yet, the total number of tuberculosis patients in all rural areas is considerable.

THE EXTENT OF THE PROBLEM.

The total number of patients on the Tuberculosis Dispensary Register on December 31st, 1935, was 687, and of these the number in rural areas amounted to 161 on that date. Of these 161 patients, 55 were regarded as “arrested”—*i.e.*, with no active disease and no infection and able to support themselves by their previous occupation, or by some reasonable and obtainable modification of this occupation. On the other hand, 106 patients were regarded as “not arrested”—a condition varying from very serious illness to a slight capacity for work.

RUSHDEN HOUSE SANATORIUM.

Throughout the year, 84 beds were available for the treatment of patients suffering from pulmonary tuberculosis. These were allocated as follows :—Men 35, Women 35, Children 14 (Boys 7, Girls 7). Of these beds, 28 were available for acute and advanced cases, as against 14 beds formerly in use.

In addition, a separate room is fitted up in the administrative block, with an emergency bed for an acute or advanced case when required. Two and at times four beds were at the service of the Tuberculosis Officer for the purpose of special treatment, such as artificial pneumothorax and gold therapy.

An average of 83.1 beds was occupied throughout the year. The London County Council kept an average of 9.2 beds occupied. There were 143 admissions (65 males, 69 females, 9 children) and 143 discharges (67 males, 67 females, 9 children). A large percentage of the adult cases admitted were of a serious and heavy type with well marked disease.

About one fourth of the male patients and one eighth of the female patients admitted were engaged in the boot and shoe industry.

The electric supply to the Sanatorium, with the exception of the new block, is still direct current, but arrangements have been made to instal alternating current in the administrative block when the X-ray plant is installed.

The roads and paths have been kept in good repair during the year by the County Surveyor.

GIFTS. A new wireless set with two loud speakers was installed in the women's pavilion through the kindness of a Rushden lady. Books, magazines, toys, clothing, eggs, a billiard table, and three beautiful hand-made bedspreads have been received, in addition to generous gifts at Christmas. Grateful thanks are extended to all the donors on behalf of the Committee, medical superintendent and the patients.

SCHOOL. Women patients free from infection continue to give useful help in the instruction of the children, and special help was given by one ex-teacher patient.

FARM AND GARDEN. The farm and garden have been very efficiently run by the sanatorium gardener. There was no Fruit Exhibit as the usual Show was not held during the year.

GENERAL. A variety of remedial exercises and occupations are available for patients considered to be in a fit state to receive benefit from them. The cases for this purpose are carefully selected and graded by the Medical Superintendent, and all exercise and work is supervised by him.

The chief exercises and occupations are walking, gardening, (including fruit growing and packing), poultry rearing, pigkeeping, joinery, carpentry, painting.

Demonstrations were given in grafting of fruit trees by the County Horticulturist and in spraying of fruit trees by the gardener.

As previously, there are facilities for repair of boots and shoes, and indoor leisure such as leather work, beadwork, making of hats, rugs, toys, garments and milk pail covers. Most useful leather and beadwork has been done during the year and a ready market was found for the finished articles.

A lady teacher and a male ex-patient have been most helpful with the leather and beadwork.

The patients continue to give useful assistance in the upkeep of the grounds and buildings.

It is of the utmost importance that patients, after leaving the Sanatorium, should report to the Tuberculosis Officer. To aid in this direction, the Medical Superintendent sees all patients

on discharge, and, in addition, each discharged patient receives printed instructions to this effect. In the case of children, the parent or guardian receives these instructions. They are also advised to get in touch immediately with their own doctor.

The Medical Superintendent encourages all ex-patients to keep in close touch with him, and it is gratifying that many do so.

A very important scheme of development at the Sanatorium is contemplated, and it is hoped to start on the first part of it in 1936. Briefly, the scheme is as follows :—

(1) Replacement of the present wooden unheated pavilions by permanent, heated buildings built of brick, *viz.* : (a) a block of 20 beds for female patients in the field beside the recent new block, which will contain dining and reading-room ; (b) a two-storeyed block for 34 male patients on the site of the present men's pavilions—when this is erected all patients will be removed from the administrative block, the acute and advanced cases being housed on the ground floor of this new block ; (c) a new block for 12 children near the site of the present children's pavilion. These replacements will make accommodation for a total of 80 patients, as against the present total of 84.

(2) Conversion of the present ground floor ward in the administrative block into a dining and reading-room for male patients ; and of the upstairs wards in the administrative block into bedrooms for staff. The present patients' dining-room will be used as a dining-room for the nursing staff, and the present nurses' dining-room will be used as a dining-room for maids.

(3) Appointment of an Assistant Resident Medical Officer. The present quarters used by the night nursing staff will be converted into a flat for this officer.

(4) The Consulting room in the administrative block will be divided into two parts, one for an X-ray plant, and the other will be used for such minor operations as artificial pneumothorax. The present dispensary will be renovated so as to be used both as a dispensary and X-ray dark room.

The X-ray plant at the Wellingborough Clinic will be transferred to the Sanatorium. As soon as this takes place, such treatment as artificial pneumothorax and gold therapy will be undertaken at the Sanatorium.

(5) Renovations and alterations in the present kitchen and stores.

4. VENEREAL DISEASES.

Treatment. The arrangements made with the Northampton General Hospital for the diagnosis and treatment of patients suffering from Venereal Diseases were continued during the year, the parties to the arrangements being as hitherto, *viz.*, the County Councils of Northampton and Buckingham and the Northampton County Borough Council.

The days and hours of openings of the Out-Patient Clinic at the Northampton General Hospital are :—

Sundays (fortnightly) at 11.30 a.m., for Males.
Mondays at 7.30 p.m., for Females.
Wednesdays at 2 p.m., for Males, and 5 p.m. for Females.
Fridays at 8 p.m., for Males.

During the year 1935, 121 new County patients attended the out-patient clinic for treatment as compared with 147 in the year 1934. The total attendances of all County patients amounted to 2,314 as against 2,948, and the number of patients discharged after completing treatment was 73 as against 86. The number who ceased to attend without completing treatment, or before the final test as to cure, was 28 as against 30.

The number of persons treated with Salvarsan Substitutes was 203 as against 201 for the year 1934.

The number of County in-patients treated at the Northampton General Hospital was 9 (males 4, females 5) as against 16 in the previous year.

It was found necessary to repay the travelling expenses of 11 persons from the County, who attended the Clinics.

The following Table supplies information as to new County cases and attendances, etc., during the three years 1933—1935.

	1933		1934		1935	
	MALES	FEMALES	MALES	FEMALES	MALES	FEMALES
1. Number dealt with at or in connection with the Out-patient Clinic for the first time	78	42	105	42	78	43
2. Total attendances of all persons at the Out-patient Clinic	1907	942	2129	819	1546	768
3. Number discharged after completion of treatment	48	27	57	29	44	29
4. Number who ceased to attend without completing treatment ...	29	2	23	7	24	4
5. Number of persons treated with Salvarsan substitutes	113	63	158	43	171	32

By the end of the year, 848 pathological examinations had been made at the Laboratory of the Hospital, as against 854 in the year 1934.

NATURE OF TESTS.	NO. OF TESTS.		
For Detection of Spirochetes	For Treatment Centre ...	...	6
	For Practitioners ...	...	3
For Detection of Gonococci	For Treatment Centre ...	...	331
	For Practitioners ...	...	121
Wassermann reaction	For Treatment Centre ...	...	119
	For Practitioners ...	...	239
Other Examinations	For Treatment Centre ...	...	29
	For Practitioners ...	...	—
	TOTAL ...	...	848

There were 12 Medical Practitioners in the County, inclusive of the two Medical Officers of the Treatment Centre, scheduled as being qualified to receive free supplies of salvarsan substitutes during the year 1935, and supplies were sent, on request, to two of these in respect of three cases.

In addition to the in-patients at the Northampton General Hospital previously mentioned, three unmarried girls received treatment in Cleveland House, Wolverhampton, and one unmarried girl, treatment at St. Mary's Home, Leicester, as County Council patients. They were admitted for treatment of pregnancy and venereal disease.

SECTION F.

Health Propaganda and Educational Work.

Educational propaganda was carried out chiefly at Thrapston and Raunds, in each case comprising a Parents' Conference followed by three lectures to men and boys over 16, and three to women and girls over 16, all illustrated by films. Advantage was taken of the presence of the lecturers to arrange also a meeting for mothers at Oundle (illustrated by a film) and at the Brigstock Camp for unemployed men; the lecturers and Honorary Secretary also addressed various smaller meetings of Women's Institutes, etc.

The audiences averaged 100—150, rising to 300 at the last lecture to girls in Raunds.

This campaign again showed the value of preliminary work to arouse interest, and it has resulted in a request for further meetings among girls who heard the lectures so that they may ask more questions and discuss their problems. These discussion meetings will be arranged in the early part of the next year's campaign. Much of the success attending the meetings was due to the work of preparation carried out so ably by Miss K. G. Moore of Wellingborough.

Friendly contact was established at the Brigstock Camp, where free literature was distributed to the men on leaving, and single talks given at intervals so as to reach each group of men as they passed through the Centre. A purely voluntary attendance of 60%, at a lecture without any film display, was encouraging for the first meeting held there.

Courses of three talks by Miss J. M. Cole, Honorary Secretary of the Northants. Branch of the British Social Hygiene Council were given at eight Infant Welfare Centres and to other organizations on different aspects of social hygiene, the total number of meetings held being 33 and the attendances approximately 3,310.

Tribute must be paid to Miss Cole for the tremendous work undertaken in connection with the campaign. The whole of the organization, including difficult preliminary arrangements were tactfully and efficiently carried out by her, under the general direction of the County Medical Officer of Health.

As stated in my previous report, Education is an important function of the Health Services. During the year under review a great deal of attention has been paid to health propaganda. With the ready co-operation of Women's Institutes, talks and lectures have been given in many districts by members of the Medical Staff. These talks were well attended, and in many Institutes arrangements have been made for a continuation series, covering several years.

Useful educational work is also carried out by Medical Officers and Health Visitors at Schools and Welfare Centres.

The following is a list of the external lectures given during the year by the medical staff.

TALKS AND LECTURES.

1935.

January	Watford W.I.
	Irthlingborough Parents' Association.
	Northants. Women's Welfare Association. Annual Meeting.
February	Bugbrooke W.I. "Health Talk."
	Brigstock W.I. "Food in relation to Health."
	Duddington W.I.
	Rushden Rotary Club.
	Middleton Cheney Parents' Association. "Guarding against infection."

March	Northamptonshire Midwives Union.
April	Potterspury W.I. "Prevention of Infectious Disease." Cold Ashby W.I. "Maternal Mortality." Arthingworth W.I. "Children's Ailments." Towcester Infant Welfare Centre. Annual Meeting. Isham W.I. Hackleton W.I. Lecture to Nurses, Northampton. Newnham & Badby Nursing Association. Annual Meeting. "The future of the Trained Nurse in the home."
May	Yardley Hastings W.I. Polebrooke W.I. Northampton Branch, Co-operative Managers' Association. Orlbury W.I.
June	Cold Ashby Nursing Association. Annual Meeting. Kettering Rotary Club. "Housing." Peterborough Diocesan Moral Welfare Association.
July	East Carlton W.I. Ashton (near Roade) W.I. Welford W.I. Little Houghton W.I.
September	Kettering Infant Welfare Centre. "Talk to Fathers and Mothers."
October	East Farndon W.I. "Food and Diet." Guilsborough Group of Women's Institutes. "Maternity and Child Welfare." Clipston W.I. "Housing."
November	Wollaston Fireside. Northamptonshire Institute of Agriculture, Moulton. "The Accredited Milk Scheme."
December	Teachers of Domestic Subjects.

SOCIAL HYGIENE.

This may be described under two headings : (a) The Educational Work of the Northamptonshire Branch of the British Social Hygiene Council, and (b) the work on behalf of unmarried mothers and their children. This work is carried out on a voluntary basis through the agency of the Peterborough Diocesan Moral Welfare Association. The Organizing Secretary of the Association who acts in close co-operation with the Health Department of the County Council, is Miss J. M. Cole, Church House, Northampton (Tel. No. 1326).

The aims and scope of both these branches of work were set out in considerable detail in my previous report, and it only remains for me to add that during the year 1935 the work was carried out helpfully and sympathetically and in full co-operation with the County Health Department.

STATISTICAL SECTION.

MATERNITY AND NURSING HOMES. The following table gives particulars of the action taken by the Local Supervising Authority under the Nursing Homes Registration Act, 1927 :—

	MATERNITY HOMES	OTHER NURSING HOMES.
Number of applications for registration received during 1935	1 *	—
Number of Homes registered	—	—
Number of orders made refusing or cancelling registration	—	—
Number of appeals against such orders	—	—
Number of cases in which such orders have been :—		
(a) confirmed on appeal	—	—
(b) disallowed	—	—
Number of applications for exemptions from registration.....	—	2
Number of cases in which exemption has been—		
(a) granted	—	2
(b) withdrawn	—	—
(c) refused	—	—

** Application subsequently withdrawn.*

The registered homes in the County at the time of reporting were (unless otherwise stated):—

1. "The Firs," Tiffield.
2. * "Enville," The Drive, Wellingborough (Maternity only).
3. * "Wilmabern," 8, Carnegie Street, Rushden (Maternity only). (Closed June, 1936).
4. * "Great Houghton Nursing Home," Post Office, Great Houghton (Maternity only).
5. "Brookfield Maternity Home," Old Rectory, Rushden (Maternity only).
6. ‡ "Elton Cottage," Upper Glapthorn, Peterborough (Elderly ladies only)
7. "The Cottage," Radstone, Brackley. (Closed 20th December, 1935).
8. * "Park Lodge," Brackley.
9. * "Cotteswood," Cotterstock Road, Oundle, (Maternity only).
10. "Eglinton," Badby Road, Daventry. (Closed June, 1936).
11. "Bethel Nursing Home," Kettering Road North, Northampton. (Opened January, 1936).

** No cases admitted during the year.*

‡ No cases admitted since April, 1935.

INFANT WELFARE CENTRES.

NAME OF CENTRE.	AVERAGE NO. OF INFANTS ATTENDING PER SESSION.	AVERAGE NO. OF CONSULTATIONS PER DOCTOR'S ATTENDANCE	ATTENDANCES BY DOCTOR.	SESSIONS.
Brackley	23	18	12	12
Brixworth	24	11	9	10
Burton Latimer	30	24	10	20
Byfield	14	14	21	21
Cold Ashby	21	8	11	11
Corby	29	31	13	20
Daventry	21	7	13	20
Desborough	29	19	16	20
Duston	15	13	12	21
Earls Barton	20	16	11	20
Finedon	28	29	9	17
Higham Ferrers	29	28	11	22
Irchester	18	4	19	20
Long Buckby	15	12	9	11
Moulton	13	11	10	10
Potterspury	21	17	11	11
Raunds	30	26	11	11
Rothwell	28	19	13	21
Rushden.....	45	31	17	39
Towcester	20	6	17	20
Wellingborough	34	36	19	45
Wollaston	32	6	19	21
Woodford (Thrapston).....	26	23	11	11
Weedon (Military)	7	6	8	11

TREATMENT OF TUBERCULOSIS.

TABLE A.

Return showing the work of the Dispensaries during the year 1935.

DIAGNOSIS.	Pulmonary				Non-Pulmonary				Total				Grand Total	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—New Cases examined during the year (excluding contacts) :—														
(a) Definitely tuberculous ...	63	65	—	1	6	8	6	9	69	73	6	10	158	
* (b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	1	2	1	1	5	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	110	116	45	45	316	479
B.—Contacts examined during the year :—														
(a) Definitely tuberculous ...	—	—	—	1	—	—	—	—	—	—	—	1	1	
* (b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	—	—	—	—	—	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	25	30	49	34	138	139
C.—Cases written off the Dispensary Register as :—														
(a) Recovered ...	22	16	8	3	7	8	11	7	29	24	19	10	82	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	—	—	—	—	—	—	137	148	96	81	462	544
D.—Number of Cases on Dispensary Register on December 31st :—														
(a) Definitely tuberculous ...	272	228	26	32	35	25	31	33	307	253	57	65	682	
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	1	2	1	1	5	687

1. Number of cases on Dispensary Register on January 1st ...	720	7. Number of consultations with medical practitioners :—	
2. Number of cases transferred from other areas, and cases returned after discharge under Head 3 in previous years ...	23	(a) Personal † ...	91
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ...	29	(b) Other ...	496
4. Cases written off during the year as Dead (all causes) ...	101	8. Number of visits by Tuberculosis Officers to homes (including personal consultations) †	629
5. Number of attendances at the Dispensary (including Contacts) ...	2,795	9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ...	2,663
6. Number of Insured Persons under Domiciliary Treatment on the 31st December ...	233	10. Number of :—	
		(a) Specimens of sputum, etc., examined ...	453
		(b) X-ray examinations made ...	729
		in connexion with Dispensary work	
		11. Number of "Recovered" cases restored to Dispensary Register, and included in A(a) and A(b) above ...	2
		12. Number of "T.B. plus" cases on Dispensary Register on December 31st ...	304

(B) NUMBER OF DISPENSARIES FOR THE TREATMENT OF TUBERCULOSIS (excluding centres used only for special forms of treatment).

Provided by the Council ...	3
Provided by Voluntary Bodies ...	—

* i.e., remaining undiagnosed on 31st December.

NON-PULMONARY TUBERCULOSIS.

TABLE B. (2)

Annual Return showing in summary form (a) the condition at the end of 1935 of all patients remaining on the Dispensary Register ; and (b) the reasons for the removal of all cases written off the Register.

[illegible]

RESIDENTIAL INSTITUTIONS.

TABLE C. (1.)

Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council.

NAME OF INSTITUTION.	FOR PULMONARY CASES.		FOR NON-PULMONARY CASES.		TOTAL.
	Adults.	Children under 15.	Adults.	Children under 15.	
RUSHDEN HOUSE SANATORIUM	70	14	—	—	84
Poor Law Institutions :—					
No beds specially set apart in these Institutions for the treatment of tuberculosis, but on account of the lack of Sanatorium accommodation, the following cases were treated during the year 1935 :—					
KETTERING.....	8	—	—	—	8

TABLE C. (2.)

Return showing the extent of Residential Treatment during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

		In Institu- tions on Jan. 1st. (1)	Admitted during the year. (2)	Disch'rged during the year. (3)	Died in the Institu- tions. (4)	In Institu- tions on Dec. 31st. (5)
Number of patients suffering from pulmonary tuberculosis	Adult—males	35	51	40	13	33
	Adult—females	25	45	37	7	26
	Children	7	3	4	1	5
	Total	67	99	81	21	64
Number of patients suffering from non- pulmonary tuberculosis.	Adult—males	8	7	6	3	6
	Adult—females	1	8	3	1	5
	Children	19	12	12	—	19
	Total	28	27	21	4	30
GRAND TOTAL.		95	126	102	25	94

TABLE C. (3.)

Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

		In Institu- tions on Jan. 1st.	Admitted during the year.	Disch'rged during the year.	Died in the Institu- tions.	In Institu- tions on Dec. 31st.
Number of patients suffering from pulmonary tuberculosis.	Adult—males	7	2	2	3	4
	Adult—females	3	3	—	2	4
	Children	—	—	—	—	—
	Total	10	5	2	5	8
Number of patients suffering from non-pulmonary tuberculosis	Adult—males	—	—	—	—	—
	Adult—females	—	—	—	—	—
	Children	—	1	1	—	—
	Total	—	1	1	—	—
GRAND TOTAL		10	6	3	5	8

INSTITUTIONAL TREATMENT.

TABLE D.

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution	Condition at time of discharge	Duration of Residential Treatment in the Institution															Grand Totals		
		Under 3 months			3—6 months			6—12 months			More than 12 months			Totals.					
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.			
Pulmonary Tuberculosis	Class T.B. minus	Quiescent	1			1	4		1	4	1	2		2	5	8	3	16	
		Not quiescent		4			2		1	4	1	1			2	10	1	13	
		Died in Institution ...	1	1			1						1	1	2	1	4		
	Class T.B. plus Group 1	Quiescent				1								1				1	
		Not quiescent		1											1			1	
		Died in Institution ...							1			1			2			2	
	Class T.B. plus Group 2	Quiescent				4			1						5			5	
		Not quiescent		1		4	3		6	1		1			11	5		16	
		Died in Institution ...	1			4	3		1	1		1	1		7	5		12	
	Class T.B. plus Group 3	Quiescent																	
		Not quiescent	2			5	3		8	6			3		15	12		27	
		Died in Institution ...				2									2			2	
	TOTALS (pulmonary)		5	7		21	16		19	16	2	6	4	3	51	43	5	99	
	Non-Pulmonary Tuberculosis	Bones and Joints	Quiescent				3					1	1		5	4		6	10
			Not quiescent					1					1		1	1	1	1	3
			Died in Institution ...										2			2			2
Abdominal		Quiescent								1	1					1	1	2	
		Not quiescent							1						1			1	
		Died in Institution ...																	
Other Organs		Quiescent																	
		Not quiescent																	
		Died in Institution ...																	
Peripheral Glands		Quiescent									2						2	2	
		Not quiescent												2			2	2	
		Died in Institution ...																	
TOTALS (non-pulmonary)					3	1		1	1	4	4		8	8	2	12	22		

TABLE I. (a)

CAUSES OF DEATH IN ADMINISTRATIVE AREAS.—URBAN DISTRICTS.

CAUSES OF DEATH.	Kettering U.D.		Brackley M.B.		Daventry M.B.		Desboro' U.D.		Finedon U.D.		Higham Ferrers M.B.		Irthling- borough U.D.		Oundle U.D.		Raunds U.D.		Rothwell U.D.		Rushden U.D.		Welling- borough U.D.		Burton Latimer U.D.		Aggregate of U.D.'s		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
All Causes	213	158	20	12	14	22	24	16	9	7	20	17	26	20	12	12	20	20	26	32	83	72	174	148	9	25	650	561	
1 Typhoid and paratyphoid fevers	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2 Measles ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3 Scarlet fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 Whooping cough	2	2	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Diphtheria ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 Influenza	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Encephalitis lethargica	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Cerebro-spinal fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Tuberculosis of respiratory system	16	10	1	...	1	1	3	1	...	...	...	...	3	2	...	...	...	...	2	1	3	2	4	7	...	3	34	28
10 Other tuberculous diseases	1	4	1	...	1	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2	4	2	...	...	1	10	9
11 Syphilis	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
12 General paralysis of the insane, tabes dorsalis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	1
13 Cancer, malignant disease	19	25	3	1	1	6	3	2	...	...	...	...	4	4	...	...	...	...	5	4	9	7	27	29	...	3	78	92
14 Diabetes	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	1	2	1	2	1	...	...	8	7
15 Cerebral hæmorrhage, &c.	12	8	...	...	1	1	1	1	...	...	...	...	2	2	...	...	...	...	...	...	5	2	11	12	...	3	35	34
16 Heart disease	48	39	1	2	5	3	6	6	5	3	7	5	4	5	3	3	5	...	...	...	14	22	43	39	2	8	149	146
17 Aneurysm	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	6	...	...	...	...	...	...	2	2
18 Other circulatory diseases	7	5	...	...	...	1	1	...	...	...	...	...	1	...	...	...	...	...	3	1	1	1	6	7	1	4	26	22
19 Bronchitis	9	4	...	...	...	...	2	...	1	...	...	...	...	...	...	...	...	...	1	1	2	4	9	8	1	1	23	17
20 Pneumonia (all forms)	12	7	...	...	...	1	...	1	...	1	2	...	1	1	...	...	...	2	1	4	3	1	...	...	...	1	27	31
21 Other respiratory diseases	7	2	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	...	...	1	3	...	...	...	...	...	14	4
22 Peptic ulcer	2	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	1	3	...	...	...	...	...	8	1
23 Diarrhœa, &c. (under 2 years)	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	...	...	3	1
24 Appendicitis	1	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	3	1
25 Cirrhosis of liver	1	1	1	...	1	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	5
26 Other diseases of liver, etc.	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	2
27 Other digestive diseases	10	7	...	1	...	4	...	1	...	...	...	...	...	...	...	...	1	2	...	...	...	...	...	...	...	1	14	21
28 Acute and chronic nephritis	10	2	4	1	1	1	2	1	1	2	1	1	...	3	4	4	1	1	28	12
29 Puerperal sepsis
30 Other puerperal causes
31 Congenital debility, premature birth, malformations, etc.	7	5	1	...	...	...	3	1	...	...	...	...	1	1	...	...	1	...	1	...	7	4	8	7	...	...	30	18
32 Senility	2	4	4	4	2	1	15	19
33 Suicide	5	5	1	12	11
34 Other violence	7	3	2	...	1	1	...	1	1	3	23	14
35 Other defined diseases	22	13	1	2	1	1	1	5	1	4	...	1	...	2	...	2	2	13	3	20	8	2	...	75	32	6
36 Causes ill-defined or unknown	1	1	1	8	...
Deaths of Infants under 1 year { Total Legitimate Illegitimate	12 11 1	6 6 ...	1 1 ...	...	...	...	3 3 ...	1 1 ...	...	1	...	...	1 1 ...	2 2 ...	1 1 ...	1 1 ...	1 1 ...	1 1 ...	1 1 ...	1 1 ...	9 6 3	6 6 ...	11 10 1	8 7 1	...	1 1 ...	40 35 5	26 25 1
Live Births { Total Legitimate Illegitimate	245 234 11	190 183 7	13 12 1	14 12 2	23 19 4	27 25 2	29 28 1	25 23 2	9 9 ...	5 5 ...	16 16 ...	13 11 2	28 27 ...	27 27 ...	12 12 ...	11 11 ...	23 23 ...	22 22 ...	24 23 1	26 25 1	85 81 4	91 88 3	159 152 7	138 132 6	16 15 1	20 20 ...	682 652 30	609 584 25	
Still- births { Total Legitimate Illegitimate	12 12 ...	4 4 ...	2 ...	2 1 1	...	...	2 2 ...	...	1 1 ...	...	1 1 ...	...	1 1 ...	1 1 ...	...	...	1 1 ...	1 1 ...	5 5 ...	1 1 ...	5 5 ...	6 6 1	4 4 ...	2 2 ...	...	1 1 ...	32 32 ...	21 19 2
Population	32,297 (32,450)	...	2,290 (2,270)	...	3,591	...	4,419	1,040 (Nil)	2,987 (4,529)	2,776	4,227 (4,440)	4,558	14,550	25,041 (26,098)	3,412	105,735 (106,080)

Wellingborough—1 death (M.) from Poliomyelitis.

CAUSES OF DEATH.	Brackley R.D.		Brixworth R.D.		Daventry R.D.		Easton-on-the-Hill R.D.		Gretton R.D.		Hardingstone R.D.		Kettering R.D.		Middleton Cheney R.D.		Northampton R.D.		Oundle (part of) R.D.		Oxendon R.D.		Potterspury R.D.		Thrapston (part of) R.D.		Towcester R.D.		Wellingborough R.D.		Oundle and Thrapston R.D.		Aggregate of R.D.'s.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
All Causes	57	65	99	93	123	102	3	3	2	3	19	22	97	76	3	3	81	84	10	11	7	9	10	9	17	84	78	73	65	82	87	769	727	
1 Typhoid and paratyphoid fevers	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
2 Measles
3 Scarlet fever	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4 Whooping cough
5 Diphtheria
6 Influenza	1	3	2	...	3	1	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Encephalitis lethargica
8 Cerebro-spinal fever
9 Tuberculosis of respiratory system	2	4	6	5	6	1	...	...	1	...	3	1	5	2	...	...	3	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
10 Other tuberculous diseases	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11 Syphilis
12 General paralysis of the insane, tabes dorsalis
13 Cancer, malignant disease
14 Diabetes
15 Cerebral hæmorrhage, &c.
16 Heart disease	11	12	11	20	19	16	...	...	...	2	...	5	18	12	...	...	16	25	2	4	3	1	1	1	...	...	...	...	...	...	...	...	...	...
17 Aneurysm
18 Other circulatory diseases
19 Bronchitis	2	5	5	7	4	4	...	...	...	1	1	2	2	5	...	...	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20 Pneumonia (all forms)
21 Other respiratory diseases
22 Peptic ulcer	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23 Diarrhoea, &c. (under 2 years)
24 Appendicitis
25 Cirrhosis of liver
26 Other diseases of liver, etc.
27 Other digestive diseases
28 Acute and chronic nephritis
29 Puerperal sepsis
30 Other puerperal causes</		

Brixworth—1 death (M.) from Poliomyelitis.

Wellingborough—1 death (F.) from Poliomyelitis.

NOTE.—In each of the areas subject to a change in boundary during the year, the statistics supplied are composite figures comprising the records of the former areas for the portion of the year prior to the date of change and those of the altered areas for the remainder of the year. In these cases, dual population figures are inserted at the foot of Tables I (a) and (b), the figures in brackets being the mid-year estimate of population for the areas as now constituted and the figures immediately above are a modified estimate of population specially designed for use with the composite records of births and deaths for the year 1935.

(The statistics given for the Daventry Rural District represent the records of the former areas of the Daventry and Crick Rural Districts for the full calendar year).

TABLE II.
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON, 1935.

CAUSES OF DEATH.		Sex.	AGGREGATE OF URBAN DISTRICTS												AGGREGATE OF RURAL DISTRICTS												
			All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	
ALL CAUSES			M. F.	650 561	40 26	4 8	4 7	15 18	26 19	33 27	27 34	53 47	104 78	159 139	185 158	769 727	51 29	2 5	5 6	12 10	30 27	36 26	33 24	62 46	120 84	199 174	219 296
1 Typhoid and paratyphoid fevers ...			M. F.	1
2 Measles			M. F.
3 Scarlet Fever			M. F.	1	2
4 Whooping cough			M. F.	4 3	1 1	2 2	1	2 1	1 1	1
5 Diphtheria			M. F.	1 5	1 1	6 4	...	3	2 2	1
6 Influenza			M. F.	10 6	1	2 1	1 1	1 1	2 2	2 1	14 18	1	...	2 ...	1	5 8	2 5
7 Encephalitis lethargica			M. F.	1 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Cerebro-spinal fever			M. F.	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Tuberculosis of respiratory system			M. F.	34 28	6 7	15 12	3 6	5 2	4 ...	1 1	...	33 24	7 9	4 3	7 1	4 3	2 1
10 Other tuberculous diseases			M. F.	10 9	1 1	...	1 2	1 2	1 2	1 ...	1	2 ...	2	3 5	1 1	1 1	1
11 Syphilis			M. F.	1 1	...	...	...	...	...	...	...	1 ...	...	...	...	2	...	...	...	...	...	...	...	...	...	...
12 General paralysis of the insane, tabes dorsalis			M. F.	2 1	1 ...	1	4	1	2
13 Cancer, malignant disease			M. F.	78 92	...	...	...	...	1	1 1	3 8	7 17	15 18	31 24	20 24	87 95	...	...	...	...	1 ...	4 4	12 11	15 27	35 29	20 22
14 Diabetes			M. F.	8 7	...	...	...	1 1	...	1 1	...	...	1 2	3 2	3 1	12 17	...	...	...	...	...	1 1	1 3	3 4	4 5	3 3
15 Cerebral hæmorrhage, etc.....			M. F.	35 34	...	...	...	...	...	...	...	2 4	5 7	13 11	15 12	40 60	...	...	...	...	...	...	4 ...	5 5	19 20	12 35
16 Heart disease			M. F.	149 146	...	...	...	1 ...	2 2	1 4	4 2	8 5	19 24	44 51	70 58	142 161	...	...	...	...	3 2	6 4	9 6	20 13	50 49	54 85
17 Aneurysm			M. F.	2 2	...	...	...	...	...	...	...	...	1 1	1 1	...	3 1	...	...	...	...	...	1 ...	1 1	1 ...	...	1 ...
18 Other circulatory diseases			M. F.	26 22	...	...	...	...	...	...	1 ...	1 1	4 1	11 9	9 11	50 47	...	...	...	...	...	...	1 2	3 5	19 10	27 30

TABLE II. (continued).
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON, 1935.

CAUSES OF DEATH.		Sex.	AGGREGATE OF URBAN DISTRICTS												AGGREGATE OF RURAL DISTRICTS											
			All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	All Ages	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
19	Bronchitis.....	M. F.	23 17	1	2	5	15	29 33	2	1	2	3	21 18	
20	Pneumonia (all forms)	M. F.	27 31	...	1	...	3	1	1	6	5	6	2	44 28	2	...	3	2	5	4	5	12	8	2		
21	Other respiratory diseases	M. F.	14 4	1	...	...	...	...	1	4	3	...	3	6 10	...	...	...	1	...	...	...	1	2	1
22	Peptic ulcer	M. F.	8 1	...	...	...	...	1	1	2	2	1	...	6 3	...	...	...	...	...	...	...	...	...	...
23	Diarrhoea, etc.	M. F.	4 4	3	...	...	...	...	...	...	...	...	...	1 4	1	1	...	...	...	...	...	...	...	...
24	Appendicitis	M. F.	2 5	...	...	1	1	...	...	1	...	...	...	5 3	...	...	...	1	...	...	...	1	3	1
25	Cirrhosis of liver	M. F.	5 2	...	...	...	...	...	...	...	2	2	1	3 ...	...	...	...	...	...	...	...	1	2	...
26	Other diseases of liver, etc.	M. F.	2 3	...	...	...	...	...	...	...	2	...	...	2 4	...	...	...	...	...	...	...	2	...	...
27	Other digestive diseases	M. F.	13 18	...	...	1	...	2	1	3	2	6	2	18 12	2	...	...	1	1	1	1	3	4	3
28	Acute and chronic nephritis	M. F.	28 12	...	...	1	1	3	2	4	9	3	4	29 24	...	...	1	...	1	...	...	4	7	10
29	Puerperal sepsis	F.	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	4	2	...	...	...	...	...
30	Other puerperal causes	F.	3	...	...	...	2	1	...	...	...	...	...	3	...	...	...	...	3	...	...	...	...	...
31	Congenital debility, premature birth, malformations, etc.	M. F.	30 18	29 17	...	...	...	...	...	...	...	...	...	36 22	36	...	...	...	...	...	...	...	...	...
32	Senility	M. F.	15 19	...	...	...	...	...	...	...	...	...	15 18	41 49	...	...	...	...	...	...	...	...	7	34 46
33	Suicide	M. F.	12 11	...	...	2	1	...	2	1	4	3	...	13 6	...	...	...	...	1	1	1	8	2	...
34	Other violence	M. F.	23 14	2 1	1	...	4	1	2	5	4	6	3	51 17	...	...	1	3	10	5	6	10	6	3
35	Other defined diseases	M. F.	75 32	3 1	...	6	4	5	1	6	16	15	19	78 63	5	...	...	1	3	8	2	5	14	24
36	Causes ill-defined, or unknown ...	M. F.	8 6	...	...	...	...	...	...	...	3	3	2	8 5	...	...	...	...	...	...	2	1	3	2
Poliomyelitis			1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...

SPECIAL CAUSES INCLUDED IN NO. 35 ABOVE.

TABLE III.
CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1935.
(52 weeks ended 28th December, 1935)

DISEASES.	URBAN DISTRICTS.													RURAL DISTRICTS.													Totals for Administrative County						
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Burton Latimer	Desborough	Finedon †	Irlingborough	Kettering	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry (incl. Crick)	Easton-on-the-Hill †	Gretton †	Hardingsstone †	Kettering	Middleton Cheney †	Northampton	Oundle †	Oundle and Thrapston x	Oxendon †		Potterspury †	Thrapston †	Towcester	Wellingborough	Totals for Combined Rural Districts	
*Small Pox ...	1	9	1	1	4	2	26	39	1	6	10	14	94	208	5	24	143	2	4	6	29	—	84	4	32	—	—	—	31	42	420	628	
*Scarlet Fever ...	3	2	—	3	1	—	—	4	—	3	1	3	41	61	—	14	16	—	—	5	3	1	17	—	1	—	—	—	5	7	63	124	
*Diphtheria ...	—	—	—	†1	1	—	†1	1	†1	—	—	†1	2	8	—	1	†4	—	—	—	†1	—	3	—	1	—	—	—	—	2	—	13	21
*Enteric Fever ...	1	2	—	—	2	—	—	3	1	—	—	1	1	12	—	2	1	—	—	—	—	—	1	—	1	—	—	—	—	—	11	23	
*Puerperal Pyrexia ...	—	2	—	—	—	—	—	—	—	—	—	—	2	5	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	4	9	
*Puerperal Fever ...	—	2	—	—	—	—	—	—	—	1	—	10	10	50	—	—	3	—	—	—	6	—	9	—	5	—	—	2	3	9	37	87	
*Erysipelas ...	—	—	1	8	1	1	1	17	—	5	—	30	13	110	2	8	3	—	—	3	21	—	17	2	6	—	—	—	20	5	91	201	
*Pneumonia ...	4	1	2	16	1	—	3	35	—	—	—	—	2	6	—	1	—	—	—	—	2	—	1	—	—	—	—	—	2	—	5	11	
Ophthalmia Neonatorum	—	—	1	—	—	—	—	2	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
Cerebro-Spinal Fever	—	—	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Tuberculosis of the Respiratory System ...	—	—	3	2	4	1	6	24	—	2	3	14	20	84	2	6	8	—	1	1	9	—	16	—	13	—	—	1	2	7	66	150	
Other Forms of Tuberculosis	—	1	—	1	—	—	—	5	—	—	1	7	1	16	1	1	6	—	—	1	2	—	1	—	3	—	—	—	1	2	22	38	
Acute Polio-Encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	
Malaria (contracted abroad)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Acute Poliomyelitis ...	—	—	—	—	—	—	—	—	—	—	—	—	5	5	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	3	8	
Totals ...	9	22	8	33	14	4	38	133	3	17	16	80	191	568	11	59	185	2	5	12	77	2	150	8	62	1	3	18	66	76	737	1305	

* The notifications shewn in respect of these diseases are as furnished by the Registrar-General : the remaining notifications shewn on the table are compiled from the weekly Returns of the District Medical Officers of Health.

† Includes one case of Paratyphoid Fever.

‡ to 31st March only, when District was changed or abolished.

x from 1st April only (new District).

FACTORY AND WORKSHOP ACT, 1901.

DISTRICTS	Number of Inspections			Nuisances under the Public Health Acts, including those specified in Sections 2, 3, 7, and 8 of the Factory & Workshop Act, 1901, as remediable under the Public Health Acts.								Offences under the Factory and Workshop Acts.	
	Factories (including Factory Laundries)	Workshops (including Workshop Laundries)	Workplaces (other than Out-workers' premises)	Want of Cleanliness	Want of Ventilation	Overcrowding	Want of Drainage of Floors	Other Nuisances	Sanitary Accommodation			Illegal Occupation of Underground Bakehouse (S.101)	Other offences (excluding offences relating to out-work and offences under Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops, Transfer of Powers) Order, 1921.)
									Insufficient	Unsuitable or Defective	Not separate for sexes		
URBAN.													
BRACKLEY (Borough) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
DAVENTRY (Borough)	25	98	14	2	...	...	...	...	...	...	...	...	...
*HIGHAM FERRERS (Borough)	...	...	...	...	...	...	...	...	...	...	...	...	...
BURTON LATIMER ... ..	...	27	...	...	...	...	...	...	...	...	...	...	...
DESBOROUGH	34	12	...	1	...	...	...	...	...	5	...	...	...
*IRTHLINGBOROUGH ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
KETTERING	99	21	2	7	...	...	...	18	...	7	...	...	...
OUNDLE ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
RAUNDS	14	14	...	...	...	...	...	1	...	...	...	...	...
ROTHWELL	29	17	...	2	...	...	...	5	...	...	...	...	...
*RUSHDEN ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
WELLINGBOROUGH	20	45	...	4	...	...	...	4	2	10	...	...	...
Combined Urban Districts ...	221	234	16	16	...	...	...	28	2	22	...	...	...
RURAL.													
*BRACKLEY ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
*BRIXWORTH ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
DAVENTRY	15	18	...	10	...	...	...	4	...	...	2	...	...
KETTERING	12	43	6	4	...	...	...	2	...	1	...	...	...
*NORTHAMPTON ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
OUNDLE & THRAPSTON ...	66	80	...	2	...	...	...	2	...	...	...	...	...
TOWCESTER ... ..	...	12	...	...	...	...	...	...	...	1	...	...	...
*WELLINGBOROUGH ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Combined Rural Districts ...	93	153	6	16	...	...	...	8	...	2	2	...	...
Administrative County ...	314	387	22	32	...	...	...	36	2	24	4	...	...

* Returns not received.
Written notices were issued as follows :—
In respect of Factories : Desborough U. 3, Kettering U. 9, Raunds U. 1, Rothwell U. 2, Wellingborough U. 17, Daventry R. 4.
In respect of Workshops : Wellingborough U. 3, Daventry R. 12, Towcester R. 1.

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